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(54) Substituted triazoles, imidazoles and pyrazoles as herbicides

(57) The present invention relates to novel heterocyclic compounds and their agronomically suitable salts, methods for the use of these compounds in controlling unwanted plant species, and the use of herbicidal compositions containing these compounds. In particular, the present invention pertains to substituted and unsubstituted triazoles, imidazoles and pyrazoles linked to a heterocyclic substituted benzene group. Such compounds are useful as pre-emergent and post-emergent herbicides.

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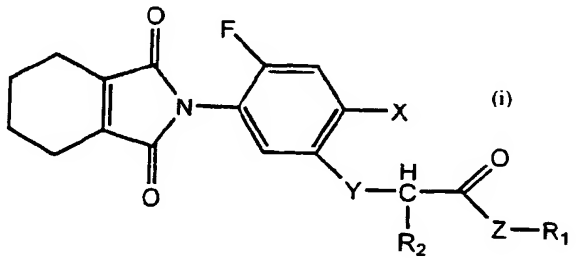
Description

[0001] The present invention relates to novel heterocyclic compounds and their agronomically suitable salts, methods for the use of these compounds in controlling unwanted plant species, and the use of herbicidal compositions containing these compounds.

[0002] The presence of unwanted plant species causes substantial damage to useful crops, especially agricultural products that satisfy the human being's basic food and fiber needs, such as cotton, rice, corn, wheat, soybean. The current population explosion and concomitant world food and fiber shortage demand improvements in efficiency of producing these crops. Prevention or minimizing loss of a portion of such valuable crops by killing, or inhibiting the growth of unwanted plant species is one way of improving this efficiency. Though many herbicides are available, the need still exists for more effective herbicides.

[0003] The compounds of the present invention in general show a usefully improved level of crop safety on soybean, corn or wheat than the known compounds.

[0004] EP 0 083 055 A2, published July 6, 1983, discloses herbicidal compounds of the following formula (i)

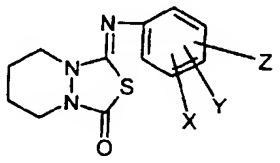


(i)

wherein

R_1 is hydrogen, alkyl, lower cycloalkyl, lower alkyl(lower)cycloalkyl, lowercycloalkyl(lower)alkyl, lower alkoxyl(lower)alkyl, lower alkenyl, lower cycloalkenyl, lower cycloalkenyl(lower)alkyl, phenyl, cyano(lower)alkyl, lower alkynyl, lower alkylideneamino, lower alkylthio(lower)alkyl, benzyl, halo(lower)alkyl or lower cycloalkylideneamino;
R_2 is hydrogen, lower alkyl, lower alkoxyl;
X is chlorine or bromine;
Y is oxygen or imino; and
Z is oxygen or sulfur.

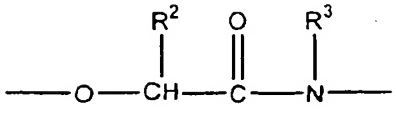
[0005] EP 0 273 417 A1 published July 6, 1988 discloses the herbicidal compounds having the formula (ii)



(ii)

wherein

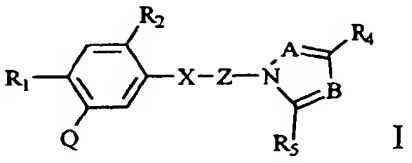
each of X and Y is hydrogen or halogen;
Z is $SCH(R)COOR^1$;
R is hydrogen, alkyl, and R^1 is alkyl, cycloalkyl, or alkoxyalkyl, or COOQ wherein Q is alkyl, or Y and Z together form



bonded to phenyl ring, wherein R^2 is H or alkyl, and R^3 is alkyl, alkenyl, or alkynyl.

[0006] The present invention relates to novel herbicidal compounds and methods for their use in controlling unwanted plant species and their use in herbicidal compositions in agriculture. In particular, the present invention pertains to substituted and unsubstituted triazoles, imidazoles and pyrazoles linked to a heterocyclic substituted benzene group.

[0007] It has now been found that certain triazoles, imidazoles and pyrazoles linked to a heterocyclic substituted benzene group are useful as pre-emergent and post-emergent herbicides. These novel compounds are represented by formula I



I

wherein

R_1	is selected from H, F, Br, Cl, NO_2 and CN;
R_2	is selected from F, Cl, Br, H and CN;
R_3	is selected from H and CN; and alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkenyl, haloalkenyl, haloalkynyl, alkoxy, alkylthio, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, aryl, arylalkyl, heteroaryl and heteroarylalkyl, all of which may be further substituted;
R_4 and R_5	are each independently selected from H, halo and CN; and alkyl, cycloalkyl, haloalkyl, alkoxy, alkylthio, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, CO_2R_6, $CONR_6R_{13}$, OR_6, SR_6, SO_2R_6, NR_6R_{13}, $SO_2NR_6R_{13}$, aryl, arylalkyl, heteroaryl and heteroarylalkyl, all of which may be further substituted;
R_6	is selected from H, alkyl, cycloalkyl, alkoxy, alkylthio, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, aryl and arylalkyl, all of which may be further substituted;
R_7	is selected from H, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl and COR_9, all of which may be further substituted;
R_8	is selected from alkyl, haloalkyl, cycloalkyl, cycloalkenyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, aryl and arylalkyl, all of which may be further substituted;
R_9	is selected from H, alkyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, alkenyl, alkynyl, haloalkyl and cycloalkyl, all of which may be further substituted;
R_{10}	is selected from H, halo, NH_2, alkyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, haloalkyl, CN, CO_2(alkyl), CONH(alkyl), $CON(alkyl)_2$ wherein each alkyl may be the same or different, CH_2CN, $CH_2CH{=}CH_2$, $CH_2C{\equiv}CH$, CH_2CO_2(alkyl), CH_2OCH_3 and CH_2-1,2,4-triazole, all of which may be further substituted;
R_{11}	is selected from H, CN, alkyl, haloalkyl and CO_2(alkyl);
R_{12}	is selected from H, alkyl, CO_2R_6, $CONR_6R_{13}$, OR_6, SR_6, SO_2R_6, $SO_2NR_6R_{13}$ and NR_6R_{13};
R_{13}	is H, alkyl, aryl or arylalkyl;
A	is N or CH;
B	is N or CR_{10};
Z	is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;
X	is selected from O, S, NR_{12}, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH{=}C(halo)CO_2$, $CH_2CH(halo)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH{=}C(halo)CONH$ and $CH_2CH(halo)CONH$ when Z is $CH(R_3)$;
X	is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, $CH{=}C(halo)CO$ and $CH_2CH(halo)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, CH=C(halo), CH_2CH(halo), CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, CH=C(halo)CONH, CH_2CH(halo)CONH and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$; and

Q is selected from NR_7COR_8, Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16 wherein

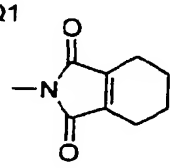
Q1 is 4,5,6,7-tetrahydrophthalimid-2-yl,
Q2 is 5,6,7,8-tetrahydro-1,2,4-triazolo[4,3-a]pyridin-3(2H)-one-1-yl,
Q3 is 5,6,7,8-tetrahydro-1H,3H-[1,3,4]thiadiazolo[3,5-a]pyridazineimin-1-yl,
Q4 is 4,5,6,7-tetrahydroimidazo[1,5-a]pyridine-1,3(2H,5H)-dione-2-yl,
Q5 is 1,6,8-triazabicyclo[4,3,0]-nonane-7,9-dion-8-yl,
Q6 is 5-(1-methyethylidene)-2,4-oxazolidinedione-3-yl,
Q7 is 5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one-3-yl,
Q8 is 4-difluoromethyl-4,5-dihydro-3-methyl-1,2,4-triazol-5(1H)-one-1-yl,
Q9 is 2-methyl-1,2,4-oxathazolidine-3,5-dione-4-yl,
Q10 is 4-chloro-1-methyl-5-difluoromethoxy-1H-pyrazol-3-yl,
Q11 is 4-bromo-1-methyl-5-trifluoromethyl-1H-pyrazol-3-yl,
Q12 is 1-substituted-6-trifluoromethyl-2,4-pyrimidione-3-yl,
Q13 is 1-substituted-6-trifluorometbyl-1,3,5-triazme-2,4-dione-1-yl,
Q14 is 4,5-disubstituted-4,5-dihydro-1,2,4-triazine-3(2H)-one-2-yl,
Q15 is 4-substituted-1,2,4-triazine-3,5(2H,4H)-dione-2-yl and
Q16 is 5-methyl-6-oxo-4-(trifluoromethyl)-6H-pyridazin-1-yl;

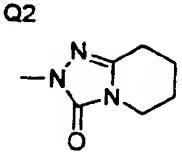
or the agronomically acceptable salts thereof.

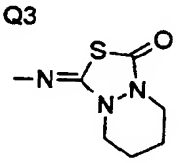
[0008] As used in the present invention, the term "aryl" is defined as a monocyclic or polycyclic ring selected from benzene, naphthalene, indene, anthracene, indacene, fluorene, acenaphthalene, phenanthrene and azulene.

[0009] "Heteroaryl" is defined as a monocyclic or polycyclic ring selected from furan, thiophene, pyrrole, isoxazole, oxazole, isothiazole, thiazole, pyrazole, imidazole, 1,2,3-triazole, 1,2,4-triazole, tetrazole, 1,2,3-thiadiazole, 1,2,4-thiadiazole, 1,3,4-thiadiazole, 1,2,3-thiadiazole, 1,2,4-thiadiazole, 1,3,4-thiadiazole, pyridine, pyridazine, pyrimidine, pyrazine, 1,3,5-triazine, 1,2,4-triazine, 1,2,4,5-tetrazine, benzofuran, benzothiophene, indole, benzisoxazole, benzoxazole, benzisothiazole, benzothiazole, benzopyrazole, benzimidazole, benzotriazole, 1,2-methylenedioxybenzene, 1,2-ethylenedioxybenzene, quinoline and isoquinoline.

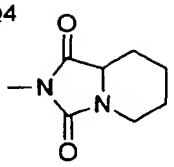
[0010] The structures of the "Q" heterocyclic groups previously named are

Q1 

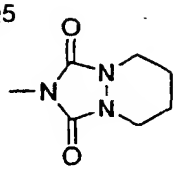
Q2 

Q3 

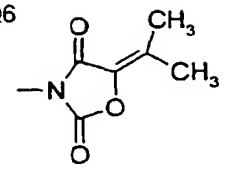
Q4



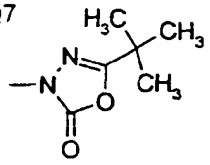
Q5



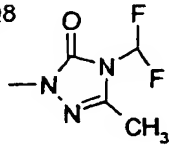
Q6



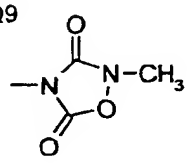
Q7



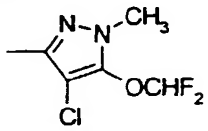
Q8



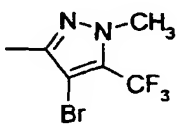
Q9



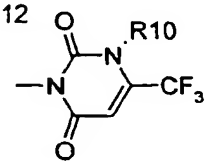
Q10



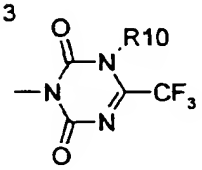
Q11



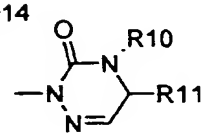
Q12



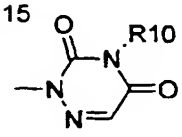
Q13



Q14

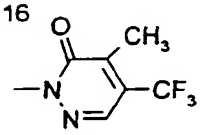


Q15



and

Q16



, where R_{10} and R_{11} are as previously defined.

[0011] The term "alkyl" includes both branched and straight chain alkyl groups. Typical alkyl groups are methyl, ethyl, *n*-propyl, isopropyl, *n*-butyl, *sec*-butyl, isobutyl, *tert*-butyl, *n*-pentyl, isopentyl, *n*-hexyl, *n*-heptyl, isooctyl, nonyl, decyl, undecyl, dodecyl and the like.

[0012] The term "cycloalkyl" refers to a cyclic aliphatic ring structure such as cyclopropane, cyclobutane, cyclopentane, cyclohexane, cycloheptane, cyclooctane and the like.

[0013] The term "haloalkyl" refers to an alkyl group substituted with one or more halo groups.

[0014] The term "halo" refers to fluoro, chloro, bromo or iodo.

[0015] The term "alkylsulfonylalkyl" refers to an alkyl group substituted with an alkylsulfonyl (alkyl-SO_2) group, for example methylsulfonylmethyl.

[0016] The term "alkylsulfinylalkyl" refers to an alkyl group substituted with an alkylsulfinyl (alkyl-SO) group, for example methylsulfinylmethyl.

[0017] The term "alkenyl" refers to an ethylenically unsaturated hydrocarbon group, straight or branched, having 1 or 2 ethylenic bonds.

[0018] The term "cycloalkenyl" refers to a cyclic aliphatic ring structure having 1 or 2 ethylenic bonds such as cyclopentene, cyclohexene, 1,4-cyclohexadiene and the like.

[0019] The term "haloalkenyl" refers to an alkenyl group substituted with one or more halo groups.

[0020] The term "alkynyl" refers to an unsaturated hydrocarbon group, straight or branched, having 1 or 2 acetylenic bonds.

[0021] The term "arylalkyl" is used to describe a group wherein the alkyl chain can be branched or straight chain with the aryl portion, as defined above, forming a terminal portion of the arylalkyl moiety.

[0022] The term "heteroarylalkyl" is used to describe a group wherein the alkyl chain can be branched or straight chain with the heteroaryl portion, as defined above, forming a terminal portion of the heteroarylalkyl moiety.

[0023] The term "alkoxy" includes both branched and straight chain alkyl groups attached to a terminal oxygen atom. Typical alkoxy groups include methoxy, ethoxy, *n*-propoxy, isopropoxy, *tert*-butoxy and the like.

[0024] The term "haloalkoxy" refers to an alkoxy group substituted with one or more halo groups.

[0025] The term "alkylthio" includes both branched and straight chain alkyl groups attached to a terminal sulfur atom.

[0026] The term "haloalkylthio" refers to an alkylthio group substituted with one or more halo groups.

[0027] Acceptable acids that may form salts of the compounds of the present invention can be selected from hydrochloric acid, hydrobromic acid, hydroiodic acid, sulfuric acid, nitric acid, phosphoric acid, oxalic acid, acetic acid, propionic acid, glycolic acid, methanesulfonic acid, toluenesulfonic acid, benzenesulfonic acid, $(C_2\text{-}C_{20})$alkylbenzenesulfonic acid, sodium hydrogen sulfate and methyl hydrogen sulfate.

[0028] Other agronomically acceptable salts may be formed by complexation of the compounds of the current invention with metal salts such as zinc chloride or iron chloride.

[0029] A preferred embodiment of this invention are the compounds of formula I wherein

R_1 is selected from H, F, Br, Cl, NO_2 and CN;

R_2 is selected from F, Cl, Br, H and CN;

R_3 is selected from H, CN and halo; and $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, $(C_2\text{-}C_{12})$alkenyl, cyclo$(C_3\text{-}C_8)$alkenyl, $(C_2\text{-}C_{12})$alkynyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_2\text{-}C_{12})$alkenyl, halo$(C_2\text{-}C_{12})$alkynyl, $(C_1\text{-}C_{12})$alkoxy, $(C_1\text{-}C_{12})$alkylthio, $(C_1\text{-}C_{12})$alkylsulfonyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}c_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{-}C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano$(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio, halocyclo$(C_3\text{-}C_8)$alkyl, aryl, heteroaryl, aryl$(C_1\text{-}C_{12})$alkyl and heteroaryl$(C_2\text{-}C_{12})$alkyl, all of which may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, $(C_2\text{-}C_{12})$alkenyl, cyclo$(C_3\text{-}C_8)$alkenyl, $(C_2\text{-}C_{12})$alkynyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_2\text{-}C_{12})$alkenyl, halo$(C_2\text{-}C_{12})$alkynyl, $(C_1\text{-}C_{12})$alkoxy, $(C_1\text{-}C_{12})$alkylthio, $(C_1\text{-}C_{12})$alkylsulfonyl, $(C_1\text{-}C_{12})$alkylsulfinyl, phenyl, phen$(C_1\text{-}C_{12})$alkyl, phen$(C_2\text{-}C_{12})$alkenyl, phen$(C_2\text{-}C_{12})$alkynyl, cyano, halo$(C_1\text{-}C_{12})$alkoxy, 1,3-dioxalan-2-yl and nitro;

R_4 and R_5 are each independently selected from H, halo and CN; and $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkoxy, $(C_1\text{-}C_{12})$alkylthio, $(C_1\text{-}C_{12})$alkylsulfonyl $(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{-}C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano$(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio, halocyclo$(C_3\text{-}C_8)$alkyl, CO_2R_6, $CONHR_6$, $CON((C_1\text{-}C_{12})\text{alkyl})R_6$, OR_6, SR_6, SO_2R_6, NRR_6, $N((C_1\text{-}C_{12})\text{alkyl})R_6$, $SO_2N((C_1\text{-}C_{12})\text{alkyl})R_6$, aryl, heteroaryl, aryl$(C_1\text{-}C_{12})$alkyl and heteroaryl$(C_2\text{-}C_{12})$alkyl, all of which may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, $(C_2\text{-}C_{12})$alkenyl, cyclo$(C_3\text{-}C_8)$alkenyl, $(C_2\text{-}C_{12})$alkynyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_2\text{-}C_{12})$alkenyl, halo$(C_2\text{-}C_{12})$alkynyl, $(C_1\text{-}C_{12})$alkoxy, $(C_1\text{-}C_{12})$alkylthio, $(C_1\text{-}C_{12})$alkylsulfonyl, $(C_1\text{-}C_{12})$alkylsulfinyl, phenyl, phen$(C_1\text{-}C_{12})$alkyl, phen$(C_2\text{-}C_{12})$alkenyl, phen$(C_2\text{-}C_{12})$alkynyl, cyano, halo$(C_1\text{-}C_{12})$alkoxy, 1,3-dioxalan-2-yl and nitro;

R_6 is selected from H, $(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{-}C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano$(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio, halocyclo$(C_3\text{-}C_8)$alkyl, aryl and aryl$(C_1\text{-}C_{12})$alkyl;

R_7 is selected from H, $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{-}C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano$(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio, halocyclo$(C_3\text{-}C_8)$alkyl and COR_9;

R_8 is selected from $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, cyclo$(C_3\text{-}C_8)$alkenyl, halo$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonyl $(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{-}C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano $(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio, halocyclo$(C_3\text{-}C_8)$alkyl, aryl and aryl$(C_1\text{-}C_{12})$alkyl;

R_9 is selected from H, $(C_1\text{-}C_{12})$alkyl, $(C_2\text{-}C_{12})$alkenyl, cyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{-}C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano$(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio and halocyclo$(C_3\text{-}C_8)$alkyl;

R_{10} is selected from H, chloro, NH_2, $(C_1\text{-}C_{12})$alkyl, halo$(C_1\text{-}C_{12})$alkyl, CN, $(C_1\text{-}C_{12})$alkylsulfonyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfinyl$(C_1\text{-}C_{12})$alkyl, $(C_1\text{-}C_{12})$alkylsulfonylcyclo$(C_3\text{-}C_8)$alkyl, $(C_1\text{ - }C_{12})$alkylsulfinylcyclo$(C_3\text{-}C_8)$alkyl, cyano$(C_1\text{-}C_{12})$alkoxy, cyano$(C_1\text{-}C_{12})$alkyl, cyanocyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkoxy, halo$(C_1\text{-}C_{12})$alkylthio, halocyclo$(C_3\text{-}C_8)$alkyl, $CO_2(C_1\text{-}C_{12})$alkyl, $CONH(C_1\text{-}C_{12})$alkyl, $CON((C_1\text{-}C_{12})\text{alkyl})_2$,

CH_2CN, $CH_2CH=CH_2$, $CH_2C\equiv CH$, $CH_2CO_2(C_1\text{-}C_{12})$alkyl, CH_2OCH_3, CH_2-1,2,4-triazole;

R_{11} is selected from H, CN, $(C_1\text{-}C_{12})$alkyl, halo$(C_1\text{-}C_{12})$alkyl and $CO_2(C_1\text{-}C_{12})$alkyl;

R_{12} is selected from H, $(C_1\text{-}C_{12})$alkyl, CO_2R_6, $CON((C_1\text{-}C_{12})alkyl)R6$, OR_6, SR_6, SO_2R_6, $SO_2N((C_1\text{-}C_{12})alkyl)R_{13}$ and $N((C_1\text{-}C_{12})alkyl)R_{13}$;

R_{13} is H, $(C_1\text{-}C_{12})$alkyl, aryl or aryl$(C_1\text{-}C_{12})$alkyl;

A is N or CH;

B is N or CR_{10};

Z is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;

X is selected from O, S, NR_{12}, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH=C(Cl)CO_2$, $CH_2CH(Cl)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$ and $CH_2CH(Cl)CONH$ when Z is $CH(R_3)$;

X is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, $CH=C(Cl)CO$, $CH_2CH(Cl)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, CH-C(Cl), $CH_2CH(Cl)$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$, $CH_2CH(Cl)CONH$ and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$;

Q is selected from NR_7COR_8, Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16;

or the agronomically acceptable salts thereof.

[0030] A more preferred embodiment of this invention are the compounds of formula I wherein

R $_1$ is H, F or Cl;

R_2 is Cl;

R $_3$ is selected from H, bromo, chloro, fluoro, $(C_1\text{-}C_6)$alkyl, cyclo$(C_5\text{-}C_6)$alkyl, $(C_2\text{-}C_6)$alkenyl, cyclo$(C_3\text{-}C_8)$alkenyl, $(C_2\text{-}C_6)$alkynyl, halo$(C_1\text{-}C_6)$alkyl, halo$(C_2\text{-}C_6)$alkenyl, halo$(C_2\text{-}C_6)$alkynyl, $(C_1\text{-}C_6)$alkoxy, $(C_1\text{-}C_6)$alkylthio, aryl, heteroaryl, aryl$(C_1\text{-}C_{12})$alkyl and heteroaryl$(C_2\text{-}C_{12})$alkyl wherein the aryl or heteroaryl group is selected from furan, naphthalene, phenyl, pyrazole, pyridine, pyrimidine, thiophene and triazole, said aryl and heteroaryl group may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, $(C_2\text{-}C_{12})$alkenyl, cyclo$(C_3\text{-}C_8)$alkenyl, $(C_2\text{-}C_{12})$alkynyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_2\text{-}C_{12})$alkenyl, halo$(C_2\text{-}C_{12})$alkynyl, $(C_1\text{-}C_{12})$alkoxy, $(C_1\text{-}C_{12})$alkylthio, $(C_1\text{-}C_{12})$alkylsulfonyl, $(C_1\text{-}C_{12})$alkylsulfinyl, phenyl, phen$(C_1\text{-}C_{12})$alkyl, phen$(C_2\text{-}C_{12})$alkenyl, phen$(C_2\text{-}C_{12})$alkynyl, cyano, halo$(C_1\text{-}C_{12})$alkoxy, 1,3-dioxalan-2-yl and nitro;

R_4 and R_5 are each independently selected from H, bromo, chloro, fluoro, CN, $(C_1\text{-}C_6)$alkyl, cyclo$(C_5\text{-}C_6)$alkyl, halo$(C_1\text{-}C_6)$alkyl, $(C_1\text{-}C_6)$alkoxy, $(C_1\text{-}C_6)$alkylthio, CO_2R_6, $CONHR_6$, $CON((C_1\text{-}C_{12})alkyl)R_6$, OR_6, SR_6, SO_2R_6, NHR_6, $N((C_1\text{-}C_{12})alkyl)R_6$, $SO_2N((C_1\text{-}C_{12})alkyl)R_6$, aryl, heteroaryl, aryl$(C_1\text{-}C_{12})$alkyl and heteroaryl$(C_2\text{-}C_{12})$alkyl, wherein the aryl or heteroaryl group is selected from furan, naphthalene, phenyl, pyrazole, pyridine, pyrimidine, thiophene and triazole, said aryl and heteroaryl group may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, $(C_2\text{-}C_{12})$alkenyl, cyclo$(C_3\text{-}C_8)$alkenyl, $(C_2\text{-}C_{12})$alkynyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_2\text{-}C_{12})$alkenyl, halo$(C_2\text{-}C_{12})$alkynyl, $(C_1\text{-}C_{12})$alkoxy, $(C_1\text{-}C_{12})$alkylthio, $(C_1\text{-}C_{12})$alkylsulfonyl, $(C_1\text{-}C_{12})$alkylsulfinyl, phenyl, phen$(C_1\text{-}C_{12})$alkyl, phen$(C_2\text{-}C_{12})$alkenyl, phen$(C_2\text{-}C_{12})$alkynyl, cyano, halo$(C_1\text{-}C_{12})$alkoxy, 1,3-dioxalan-2-yl and nitro;

R_6 is selected from H, $(C_1\text{-}C_{12})$alkyl, aryl and aryl$(C_1\text{-}C_6)$alkyl, where the aryl group is naphthyl or phenyl;

R_7 is selected from H, $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, halo$(C_1\text{-}C_{12})$alkyl and COR_9;

R_8 is selected from $(C_1\text{-}C_{12})$alkyl, cyclo$(C_3\text{-}C_8)$alkyl, cyclo$(C_3\text{-}C_8)$alkenyl, halo$(C_1\text{-}C_{12})$alkyl, aryl and aryl$(C_1\text{-}C_6)$alkyl;

R_9 is selected from H, $(C_1\text{-}C_6)$alkyl, $(C_2\text{-}C_{12})$alkenyl, $(C_2\text{-}C_6)$alkenyl, cyclo$(C_3\text{-}C_8)$alkyl, cyclo$(C_5\text{-}C_6)$ alkyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_1\text{-}C_6)$alkyl;

R_{10} is selected from H, chloro, NH_2, $(C_1\text{-}C_6)$alkyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_1\text{-}C_6)$alkyl, CN, $CO_2(C_1\text{-}C_{12})$alkyl, $CONH(C_1\text{-}C_{12})$alkyl, $CON((C_1\text{-}C_{12})alkyl)_2$, CH_2CN, $CH_2CH=CH_2$, $CH_2C\equiv CH$, $CH_2CO_2(C_1\text{-}C_{12})$alkyl, CH_2OCH_3, CH_2-1,2,4-triazole;

R_{11} is selected from H, CN, $(C_1\text{-}C_6)$alkyl, halo$(C_1\text{-}C_{12})$alkyl, halo$(C_1\text{-}C_6)$alkyl and $CO_2(C_1\text{-}C_{12})$alkyl;

R_{12} is selected from H, $(C_1\text{-}C_8)$alkyl, CO_2R_6, $CON((C_1\text{-}C_8)alkyl)R_6$, OR_6, SR_6, SO_2R_6, $SO_2N((C_1\text{-}C_8)alkyl)R_{13}$ and $N((C_1\text{-}C_8)alkyl)R_{13}$;

R_{13} is H, $(C_1\text{-}C_8)$alkyl, aryl or aryl$(C_1\text{-}C_6)$alkyl where the aryl group is naphthyl or phenyl;

A is N or CH;

B is N or CR_{10};

Z is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;

X is selected from O, S, NH, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH=C(Cl)CO_2$, $CH_2CH(Cl)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$ and $CH_2CH(Cl)CONH$ when Z is $CH(R_3)$;

X is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, $CH=C(Cl)CO$ and $CH_2CH(Cl)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, $CH=C(Cl)$, $CH_2CH(Cl)$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$, $CH_2CH(Cl)CONH$ and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$;

Q is NR_7COR_8, or selected from Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16;

or the agronomically acceptable salts thereof selected from those formed from hydrochloric acid, sulfuric acid, acetic acid, propionic acid, phosphoric acid and oxalic acid.

[0031] An even more preferred embodiment of this invention are the compounds of formula I wherein

R_1 is H, F or Cl;

R_2 is Cl;

R_3 is selected from H, bromo, chloro, fluoro, $(C_1$-$C_6)$alkyl, cyclo$(C_5$-$C_6)$alkyl, $(C_2$-$C_6)$alkenyl, cyclo$(C_3$-$C_8)$alkenyl, $(C_2$-$C_6)$alkynyl, halo$(C_1$-$C_6)$alkyl, halo$(C_2$-$C_6)$alkenyl, halo$(C_2$-$C_6)$alkynyl, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkylthio, 3-furyl, 4-chloro-2-furyl, 5-chloro-2-furyl, 5-chloro-3-furyl, 2,5-dichloro-3-furyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1, 3-dioxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3, 5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2, 5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl, 3,4, 5-trifluorophenyl, 2-pyridyl, 4-chloro-2-pyridyl, 6-chloro-2-pyridyl, 4,6-dichloro-2-pyridyl, 3-pyridyl, 5-bromo-3-pyridyl, 5,6-dichloro-3-pyridyl, 5-chloro-3-pyridyl, 5-fluoro-3-pyridyl, 4-pyridyl, 2-fluoro-4-pyridyl, 2-chloro-4-pyridyl, 2-chloro-6-methyl-4-pyridyl, 2-methyl-4-pyridyl, 2-methoxy-4-pyridyl, 2-cyano-4-pyridyl, 2,6-difluoro-4-pyridyl, 2, 6-dichloro-4-pyridyl, 2-thienyl, 3-thienyl, 4-chloro-2-thienyl, 5-chloro-2-thienyl, 5-chloro-3-thienyl and 2,5-dichloro-3-thienyl;

R_4 and R_5 are each independently selected from H, bromo, chloro, fluoro, CN, $(C_1$-$C_6)$alkyl, cyclo$(C_5$-$C_6)$alkyl, halo$(C_1$-$C_6)$alkyl, $(C_1$-$C_6)$alkoxy, $(C_1$-$C_6)$alkylthio, CO_2R_6, $CONHR_6$, $CON((C_1$-$C_6)$alkyl$)R_6$, OR_6, SR_6, SO_2R_6, NHR_6, 3-furyl, 4-chloro-2-furyl, 5-chloro-2-furyl, 5-chloro-3-furyl, 2,5-dichloro-3-furyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-dioxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3,5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2,5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl, 3,4,5-trifluorophenyl, 2-pyridyl, 4-chloro-2-pyridyl, 6-chloro-2-pyridyl, 4,6-dichloro-2-pyridyl, 3-pyridyl, 5-bromo-3-pyridyl, 5,6-dichloro-3-pyridyl, 5-chloro- 3-pyridyl, 5-fluoro-3-pyridyl, 4-pyridyl, 2-fluoro-4-pyridyl, 2-chloro-4-pyridyl, 2-chloro-6-methyl-4-pyridyl, 2-methyl-4-pyridyl, 2-methoxy-4-pyridyl, 2-cyano-4-pyridyl, 2,6-difluoro-4-pyridyl 2,6-dichloro-4-pyridyl, 2-thienyl, 3-thienyl, 4-chloro-2-thienyl, 5-chloro-2-thienyl, 5-chloro-3-thienyl and 2,5-dichloro-3-thienyl;

R_6 is selected from H, $(C_1$-$C_6)$alkyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-thoxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3, 5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2,5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl and 3,4,5-trifluorophenyl;

R_7 is selected from H, $(C_1$-$C_6)$alkyl, cyclo$(C_5$-$C_6)$alkyl, halo$(C_1$-$C_6)$alkyl and COR_9;

R_8 is $(C_1$- $C_6)$alkyl, cyclo$(C_5$-$C_6)$alkyl, halo$(C_1$-$C_{12})$alkyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-dioxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3,5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2,5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl and 3,4,5-trifluorophenyl;

R_9 is selected from H, $(C_1$-$C_6)$alkyl, $(C_2$-$C_6)$alkenyl, cyclo$(C_5$-$C_6)$alkyl and halo$(C_1$-$C_6)$alkyl;

R_{10} is selected from H, chloro, NH_2, $(C_1$-$C_6)$alkyl, halo$(C_1$-$C_6)$alkyl, CN, $CO_2(C_1$-$C_6)$alkyl, $CONH(C_1$-$C_6)$alkyl, $CON((C_1$-$C_6)$alkyl$)_2$, CH_2CN, $CH_2CH=CH_2$, $CH_2C\equiv CH$, $CH_2CO_2(C_1$-$C_6)$alkyl, CH_2OCH_3 and CH_2-1,2,4-triazole;

R_{11} is H, CN, $(C_1$-$C_6)$alkyl, halo$(C_1$-$C_6)$alkyl and $CO_2(C_1$-$C_6)$alkyl;

R_{12} is selected from H, $(C_1$-$C_8)$alkyl, $CO_2(C_1$-$C_6)$alkyl, $CON((C_1$-$C_6)$alkyl$)_2$, $O(C_1$-$C_6)$alkyl, $S(C_1$-$C_6)$alkyl, $SO_2(C_1$-$C_6)$alkyl, $SO_2N((C_1$-$C_6)$alkyl$)_2$ and $N((C_1$-$C_6)$alkyl$)2$;

R_{13} is H, $(C_1$-$C_6)$alkyl, aryl or aryl$(C_1$-$C_4)$alkyl where the aryl group is naphthyl or phenyl;

A is N or CH;

B is N or CR_{10};

Z is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;

X is selected from O, S, NH, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH=C(Cl)CO_2$, $CH_2CH(Cl)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$ and $CH_2CH(Cl)CONH$ when Z is $CH(R_3)$;

X is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, CH-C(Cl)CO and $CH_2CH(Cl)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, CH=C(Cl), $CH_2CH(Cl)$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$, $CH_2CH(Cl)CONH$ and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$;

Q is selected from Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16;

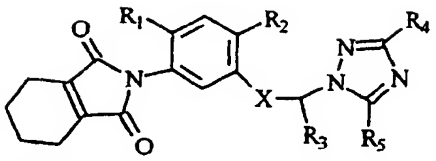
or the agronomically acceptable salts thereof selected from those formed from hydrochloric acid, acetic acid, phosphoric acid and oxalic acid.

[0032] A second aspect of this invention relates to herbicidal compositions comprising a compound of formula I and an agronomically acceptable carrier.

[0033] A third aspect of this invention relates to a method of controlling a weed comprising applying a herbicidally effective amount of a composition comprising a compound of formula I and an agronomically acceptable carrier to the weed, to the locus of the weed or to the growth medium of said weed.

[0034] The following examples of the compounds of formula I are presented in Tables 1-25 and are representative of the invention. In these tables, the abbreviation "Ph" is used to mean phenyl, "Ph-4-Cl" is used to mean 4-chlorophenyl, "Ph-4-F" is used to mean 4-fluorophenyl, "CH_2Ph" is used to mean benzyl, "CH_2Ph-4-Cl" is used to mean 4-chlorobenzyl, "3-Py" is used to mean 3-pyridyl, "Me" is used to mean methyl and "Et" is used to mean ethyl.

Table 1



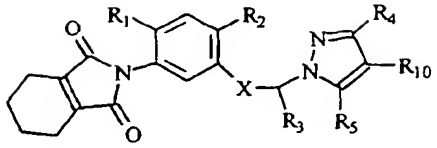
where A=B=N, Q=Q1 in a compound of formula I

No	R_1	R_2	X	R_3	R_4	R_5
1	F	Cl	CO_2	H	H	H
2	F	Cl	CO_2	CH_3	H	H
3	F	Cl	CO_2	C_2H_5	H	H
4	F	Cl	CO_2	C_3H_7	H	H
5	F	Cl	CO_2	H	CH_3	CH_3
6	F	Cl	CO_2	CH_3	Ph	CH_3
7	F	Cl	CO_2	C_2H_5	Ph-4-Cl	H
8	F	Cl	CO_2	H	H	SCH_3
9	F	Cl	CO_2	CN	H	H
10	F	Cl	CO_2	Ph	H	H
11	F	Cl	CO_2	CH_2Ph	H	H
12	F	Cl	CO_2	Ph-4-Cl	H	H
13	F	Cl	CO_2	CH_2Ph-4-Cl	H	H
14	F	Cl	CO_2	3-Py	H	H
15	F	Cl	OCH_2CO_2	H	H	H
16	F	Cl	OCH_2CO_2	CH_3	H	H
17	F	Cl	OCH_2CO_2	C_2H_5	H	H
18	F	Cl	OCH_2CO_2	C_3H_7	H	H
19	F	Cl	OCH_2CO_2	H	CH_3	CH_3
20	F	Cl	OCH_2CO_2	CH_3	Ph	CH_3
21	F	Cl	OCH_2CO_2	C_2H_5	Ph-4-Cl	H
22	F	Cl	OCH_2CO_2	H	H	SCH_3
23	F	Cl	OCH_2CO_2	CN	H	H
24	F	Cl	OCH_2CO_2	Ph	H	H
25	F	Cl	OCH_2CO_2	CH_2Ph	H	H
26	F	Cl	OCH_2CO_2	Ph-4-Cl	H	H
27	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl	H	H
28	F	Cl	OCH_2CO_2	3-Py	H	H

29	F	Cl	$OCH(CH_3)CO_2$	H	H	H
30	F	Cl	$OCH(CH_3)CO_2$	CH_3	H	H
31	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	H	H
32	F	Cl	$OCH(CH_3)CO_2$	C_3H_7	H	H
33	F	Cl	$OCH(CH_3)CO_2$	H	CH_3	CH_3
34	F	Cl	$OCH(CH_3)CO_2$	CH_3	Ph	CH_3
35	F	Cl	$CH=C(Cl)CO_2$	H	H	H
36	F	Cl	$CH_2CH(Cl)CO_2$	H	H	H
37	F	Cl	$OCH(CH_3)CO_2$	CN	H	H
38	F	Cl	$OCH(CH_3)CO_2$	Ph	H	H
39	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph	H	H
40	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl	H	H
41	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl	H	H
42	F	Cl	$OCH(CH_3)CO_2$	3-Py	H	H
43	F	Cl	O	H	H	H
44	F	Cl	O	CH_3	H	H
45	F	Cl	O	C_2H_5	H	H
46	F	Cl	O	C_3H_7	H	H
47	F	Cl	O	H	CH_3	CH_3
48	F	Cl	O	CH_3	Ph	CH_3
49	F	Cl	O	C_2H_5	Ph-4-Cl	H
50	F	Cl	O	H	H	SCH_3
51	F	Cl	O	CN	H	H
52	F	Cl	O	Ph	H	H
53	F	Cl	O	CH_2Ph	H	H
54	F	Cl	O	Ph-4-Cl	H	H
55	F	Cl	O	CH_2Ph-4-Cl	H	H
56	F	Cl	O	3-Py	H	H
57	F	Cl	SCH_2CO_2	H	H	H
58	F	Cl	SCH_2CO_2	CH_3	H	H
59	F	Cl	SCH_2CO_2	C_2H_5	H	H
60	F	Cl	SCH_2CO_2	C_3H_7	H	H
61	F	Cl	SCH_2CO_2	H	CH_3	CH_3
62	F	Cl	SCH_2CO_2	CH_3	Ph	CH_3
63	F	Cl	SCH_2CO_2	C_2H_5	Ph-4-Cl	H
64	F	Cl	SCH_2CO_2	H	H	SCH_3
65	F	Cl	SCH_2CO_2	CN	H	H
66	F	Cl	SCH_2CO_2	Ph	H	H
67	F	Cl	SCH_2CO_2	CH_2Ph	H	H
68	F	Cl	SCH_2CO_2	Ph-4-Cl	H	H
69	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl	H	H
70	F	Cl	SCH_2CO_2	3-Py	H	H
71	F	H	$SCH(CH_3)CO_2$	H	H	H
72	F	Cl	$SCH(CH_3)CO_2$	CH_3	H	H
73	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	H	H
74	F	Cl	$SCH(CH_3)CO_2$	C_3H_7	H	H
75	F	Cl	$SCH(CH_3)CO_2$	H	CH_3	CH_3
76	F	Cl	$SCH(CH_3)CO_2$	CH_3	Ph	CH_3

77	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	Ph-4-Cl	H
78	F	Cl	$SCH(CH_3)CO_2$	H	H	SCH_3
79	F	Cl	$SCH(CH_3)CO_2$	CN	H	H
80	F	Cl	$SCH(CH_3)CO_2$	Ph	H	H
81	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph	H	H
82	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl	H	H
83	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl	H	H
84	F	Cl	$SCH(CH_3)CO_2$	3-Py	H	H
85	F	Cl	S	H	H	H
86	F	Cl	S	CH_3	H	H
87	F	Cl	S	C_2H_5	H	H
88	F	Cl	S	C_3H_7	H	H
89	F	Cl	S	H	CH_3	CH_3
90	F	Cl	S	CH_3	Ph	CH_3
91	F	Cl	S	C_2H_5	Ph-4-Cl	H
92	F	Cl	S	H	H	SCH_3
93	F	Cl	S	CN	H	H
94	F	Cl	S	Ph	H	H
95	F	Cl	S	CH_2Ph	H	H
96	F	Cl	S	Ph-4-Cl	H	H
97	F	Cl	S	CH_2Ph-4-Cl	H	H
98	F	Cl	S	3-Py	H	H
99	F	Cl	$CH=C(Cl)CO_2$	CN	H	H
100	F	Cl	$CH_2CH(Cl)CO_2$	CN	H	H
101	F	Cl	$CH=C(Cl)CO_2$	CH_3	H	H
102	F	Cl	$CH_2CH(Cl)CO_2$	CH_3	H	H
103	Cl	Cl	O	H	H	H
104	Cl	Cl	OCH_2CO_2	H	H	H
105	Cl	Cl	$OCH(CH_3)CO_2$	H	H	H
106	Cl	Cl	$CH=C(Cl)CO_2$	H	H	H
107	Cl	Cl	$CH_2CH(Cl)CO_2$	H	H	H
108	Cl	Cl	$CH_2CH(Cl)CO_2$	CH_3	H	H
109	Cl	Cl	SCH_2CO_2	H	H	H
110	Cl	Cl	$SCH(CH_3)CO_2$	H	H	H
111	Cl	Cl	CO_2	H	H	H
112	H	Cl	O	H	H	H
113	H	Cl	OCH_2CO_2	H	H	H
114	H	Cl	$OCH(CH_3)CO_2$	H	H	H
115	H	Cl	$CH=C(Cl)CO_2$	H	H	H
116	H	Cl	$CH_2CH(Cl)CO_2$	H	H	H
117	H	Cl	S	H	H	H
118	H	Cl	SCH_2CO_2	H	H	H
119	H	Cl	$SCH(CH_3)CO_2$	H	H	H
120	H	Cl	$CH=C(Cl)CO_2$	H	H	H
121	H	Cl	$CH_2CH(Cl)CO_2$	H	H	H
122	H	Cl	CO_2	H	H	H
123	F	Cl	OCH_2CONH	H	H	H
124	F	Cl	SCH_2CONH	H	H	H

Table 2



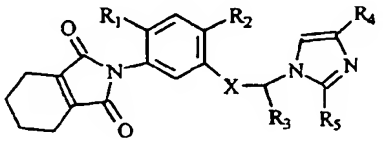
where A=N, B=CR_{10} and Q=Q1 in a compound of formula **I**

No	R_1	R_2	X	R_3	R_4	R_5	R_{10}
125	F	Cl	CO_2	H	H	H	H
126	F	Cl	CO_2	CH_3	H	H	H
127	F	Cl	CO_2	C_2H_5	H	H	H
128	F	Cl	CO_2	H	Cl	Cl	CO_2CH_3
129	F	Cl	CO_2	H	CH_3	CH_3	H
130	F	Cl	CO_2	CH_3	Ph	CH_3	H
131	F	Cl	CO_2	C_2H_5	Ph-4-Cl	H	H
132	F	Cl	CO_2	H	C_2H_5	CO_2Et	H
133	F	Cl	CO_2	CN	H	H	H
134	F	Cl	CO_2	Ph	H	H	H
135	F	Cl	CO_2	CH_2Ph	H	H	H
136	F	Cl	CO_2	Ph-4-Cl	H	H	H
137	F	Cl	CO_2	CH_2Ph-4-Cl	H	H	H
138	F	Cl	CO_2	3-Py	H	H	H
139	F	Cl	OCH_2CO_2	H	H	H	H
140	F	Cl	OCH_2CO_2	CH_3	H	H	H
141	F	Cl	OCH_2CO_2	C_2H_5	H	H	H
142	F	Cl	OCH_2CO_2	H	Cl	Cl	CO_2CH_3
143	F	Cl	OCH_2CO_2	H	CH_3	CH_3	H
144	F	Cl	OCH_2CO_2	CH_3	Ph	CH_3	H
145	F	Cl	OCH_2CO_2	C_2H_5	Ph-4-Cl	H	H
146	F	Cl	OCH_2CO_2	H	C_2H_5	CO_2Et	H
147	F	Cl	OCH_2CO_2	CN	H	H	H
148	F	Cl	OCH_2CO_2	Ph	H	H	H
149	F	Cl	OCH_2CO_2	CH_2Ph	H	H	H
150	F	Cl	OCH_2CO_2	Ph-4-Cl	H	H	H
151	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl	H	H	H
152	F	Cl	OCH_2CO_2	3-Py	H	H	H
153	F	Cl	$OCH(CH_3)CO_2$	H	H	H	H
154	F	Cl	$OCH(CH_3)CO_2$	CH_3	H	H	H
155	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	H	H	H
156	F	Cl	$OCH(CH_3)CO_2$	H	Cl	Cl	CO_2CH_3
157	F	Cl	$OCH(CH_3)CO_2$	H	CH_3	CH_3	H
158	F	Cl	$OCH(CH_3)CO_2$	CH_3	Ph	CH_3	H
159	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	Ph-4-Cl	H	H
160	F	Cl	$OCH(CH_3)CO_2$	H	C_2H_5	CO_2Et	H
161	F	Cl	$OCH(CH_3)CO_2$	CN	H	H	H

162	F	Cl	$OCH(CH_3)CO_2$	Ph	H	H	H
163	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph	H	H	H
164	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl	H	H	H
165	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl	H	H	H
166	F	Cl	$OCH(CH_3)CO_2$	3-Py	H	H	H
167	F	Cl	O	H	H	H	H
168	F	Cl	O	CH_3	H	H	H
169	F	Cl	O	C_2H_5	H	H	H
170	F	Cl	O	H	Cl	Cl	CO_2CH_3
171	F	Cl	O	H	CH_3	CH_3	H
172	F	Cl	O	CH_3	Ph	CH_3	H
173	F	Cl	O	C_2H_5	Ph-4-Cl	H	H
174	F	Cl	O	H	C_2H_5	CO_2Et	H
175	F	Cl	O	CN	H	H	H
176	F	Cl	O	Ph	H	H	H
177	F	Cl	O	CH_2Ph	H	H	H
178	F	Cl	O	Ph-4-Cl	H	H	H
179	F	Cl	O	CH_2Ph-4-Cl	H	H	H
180	F	Cl	O	3-Py	H	H	H
181	F	Cl	SCH_2CO_2	H	H	H	H
182	F	Cl	SCH_2CO_2	CH_3	H	H	H
183	F	Cl	SCH_2CO_2	C_2H_5	H	H	H
184	F	Cl	SCH_2CO_2	H	Cl	Cl	CO_2CH_3
185	F	Cl	SCH_2CO_2	H	CH_3	CH_3	H
186	F	Cl	SCH_2CO_2	CH_3	Ph	CH_3	H
187	F	Cl	SCH_2CO_2	C_2H_5	Ph-4-Cl	H	H
188	F	Cl	SCH_2CO_2	H	C_2H_5	CO_2Et	H
189	F	Cl	SCH_2CO_2	CN	H	H	H
190	F	Cl	SCH_2CO_2	Ph	H	H	H
191	F	Cl	SCH_2CO_2	CH_2Ph	H	H	H
192	F	Cl	SCH_2CO_2	Ph-4-Cl	H	H	H
193	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl	H	H	H
194	F	Cl	SCH_2CO_2	3-Py	H	H	H
195	F	Cl	$SCH(CH_3)CO_2$	H	H	H	H
196	F	Cl	$SCH(CH_3)CO_2$	CH_3	H	H	H
197	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	H	H	H
198	F	Cl	$SCH(CH_3)CO_2$	H	Cl	Cl	CO_2CH_3
199	F	Cl	$SCH(CH_3)CO_2$	H	CH_3	CH_3	H
200	F	Cl	$SCH(CH_3)CO_2$	CH_3	Ph	CH_3	H
201	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	Ph-4-Cl	H	H
202	F	Cl	$SCH(CH_3)CO_2$	H	C_2H_5	CO_2Et	H
203	F	Cl	$SCH(CH_3)CO_2$	CN	H	H	H
204	F	Cl	$SCH(CH_3)CO_2$	Ph	H	H	H
205	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph	H	H	H
206	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl	H	H	H
207	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl	H	H	H
208	F	Cl	$SCH(CH_3)CO_2$	3-Py	H	H	H
209	F	Cl	S	H	H	H	H

210	F	Cl	S	CH_3	H	H	H
211	F	Cl	S	C_2H_5	H	H	H
212	F	Cl	S	H	Cl	Cl	CO_2CH_3
213	F	Cl	S	H	CH_3	CH_3	H
214	F	Cl	S	CH_3	Ph	CH_3	H
215	F	Cl	S	C_2H_5	Ph-4-Cl	H	H
216	F	Cl	S	H	C_2H_5	CO_2Et	H
217	F	Cl	S	CN	H	H	H
218	F	Cl	S	Ph	H	H	H
219	F	Cl	S	CH_2Ph	H	H	H
220	F	Cl	S	Ph-4-Cl	H	H	H
221	F	Cl	S	CH_2Ph-4-Cl	H	H	H
222	F	Cl	S	3-Py	H	H	H
223	F	Cl	$CH=C(Cl)CO_2$	H	H	H	H
224	F	Cl	$CH_2CH(Cl)CO_2$	H	H	H	H
225	Cl	Cl	O	H	H	H	H
226	Cl	Cl	OCH_2CO_2	H	H	H	H
227	Cl	Cl	S	H	H	H	H
228	Cl	Cl	SCH_2CO_2	H	H	H	H
229	Cl	Cl	$SCH(CH_3)CO_2$	H	H	H	H
230	Cl	Cl	CO_2	H	H	H	H
231	H	Cl	O	H	H	H	H
232	H	Cl	OCH_2CO_2	H	H	H	H
233	H	Cl	S	H	H	H	H
234	H	Cl	SCH_2CO_2	H	H	H	H
235	H	Cl	CO_2	H	H	H	H

Table 3



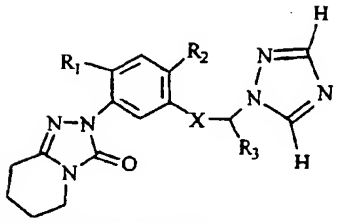
where A=CH, B=N and Q=Q1 in a compound of formula I

No	R_1	R_2	X	R_3	R_4	R_5
236	F	Cl	CO_2	H	H	H
237	F	Cl	CO_2	CH_3	H	H
238	F	Cl	CO_2	C_2H_5	H	H
239	F	Cl	CO_2	H	Cl	Cl
240	F	Cl	CO_2	H	CH_3	CH_3
241	F	Cl	CO_2	CH_3	Ph	CH_3
242	F	Cl	CO_2	C_2H_5	Ph-4-Cl	H
243	F	Cl	CO_2	H	Ph-4-Cl	CH_3
244	F	Cl	CO_2	CN	H	H
245	F	Cl	CO_2	Ph	H	H
246	F	Cl	CO_2	CH_2Ph	H	H

247	F	Cl	CO_2	Ph-4-Cl	H	H
248	F	Cl	CO_2	CH_2Ph-4-Cl	H	H
249	F	Cl	CO_2	3-Py	H	H
250	F	Cl	OCH_2CO_2	H	H	H
251	F	Cl	OCH_2CO_2	CH_3	H	H
252	F	Cl	OCH_2CO_2	C_2H_5	H	H
253	F	Cl	OCH_2CO_2	H	Cl	Cl
254	F	Cl	OCH_2CO_2	H	CH_3	CH_3
255	F	Cl	OCH_2CO_2	CH_3	Ph	CH_3
256	F	Cl	OCH_2CO_2	C_2H_5	Ph-4-Cl	H
257	F	Cl	OCH_2CO_2	H	Ph-4-Cl	CH_3
258	F	Cl	OCH_2CO_2	CN	H	H
259	F	Cl	OCH_2CO_2	Ph	H	H
260	F	Cl	OCH_2CO_2	CH_2Ph	H	H
261	F	Cl	OCH_2CO_2	Ph-4-Cl	H	H
262	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl	H	H
263	F	Cl	OCH_2CO_2	3-Py	H	H
264	F	Cl	$OCH(CH_3)CO_2$	H	H	H
265	F	Cl	$OCH(CH_3)CO_2$	CH_3	H	H
266	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	H	H
267	F	Cl	$OCH(CH_3)CO_2$	H	Cl	Cl
268	F	Cl	$OCH(CH_3)CO_2$	H	CH_3	CH_3
269	F	Cl	$OCH(CH_3)CO_2$	CH_3	Ph	CH_3
270	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	Ph-4-Cl	H
271	F	Cl	$OCH(CH_3)CO_2$	H	Ph-4-Cl	CH_3
272	F	Cl	$OCH(CH_3)CO_2$	CN	H	H
273	F	Cl	$OCH(CH_3)CO_2$	Ph	H	H
274	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph	H	H
275	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl	H	H
276	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl	H	H
277	F	Cl	$OCH(CH_3)CO_2$	3-Py	H	H
278	F	Cl	O	H	H	H
279	F	Cl	O	CH_3	H	H
280	F	Cl	O	C_2H_5	H	H
281	F	Cl	O	H	Cl	Cl
282	F	Cl	O	H	CH_3	CH_3
283	F	Cl	O	CH_3	Ph	CH_3
284	F	Cl	O	C_2H_5	Ph-4-Cl	H
285	F	Cl	O	H	Ph-4-Cl	CH_3
286	F	Cl	O	CN	H	H
287	F	Cl	O	Ph	H	H
288	F	Cl	O	CH_2Ph	H	H
289	F	Cl	O	Ph-4-Cl	H	H
290	F	Cl	O	CH_2Ph-4-Cl	H	H
291	F	Cl	O	3-Py	H	H
292	F	Cl	SCH_2CO_2	H	H	H
293	F	Cl	SCH_2CO_2	CH_3	H	H
294	F	Cl	SCH_2CO_2	C_2H_5	H	H

295	F	Cl	SCH_2CO_2	H	Cl	Cl
296	F	Cl	SCH_2CO_2	H	CH_3	CH_3
297	F	Cl	SCH_2CO_2	CH_3	Ph	CH_3
298	F	Cl	SCH_2CO_2	C_2H_5	Ph-4-Cl	H
299	F	Cl	SCH_2CO_2	H	Ph-4-Cl	CH_3
300	F	Cl	SCH_2CO_2	CN	H	H
301	F	Cl	SCH_2CO_2	Ph	H	H
302	F	Cl	SCH_2CO_2	CH_2Ph	H	H
303	F	Cl	SCH_2CO_2	Ph-4-Cl	H	H
304	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl	H	H
305	F	Cl	SCH_2CO_2	3-Py	H	H
306	F	Cl	$SCH(CH_3)CO_2$	H	H	H
307	F	Cl	$SCH(CH_3)CO_2$	CH_3	H	H
308	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	H	H
309	F	Cl	$SCH(CH_3)CO_2$	H	Cl	Cl
310	F	Cl	$SCH(CH_3)CO_2$	H	CH_3	CH_3
311	F	Cl	$SCH(CH_3)CO_2$	CH_3	Ph	CH_3
312	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	Ph-4-Cl	H
313	F	Cl	$SCH(CH_3)CO_2$	H	Ph-4-Cl	CH_3
314	F	Cl	$SCH(CH_3)CO_2$	CN	H	H
315	F	Cl	$SCH(CH_3)CO_2$	Ph	H	H
316	F	Cl	S	H	H	H
317	F	Cl	S	CH_3	H	H
318	F	Cl	S	C_2H_5	H	H
319	F	Cl	S	H	Cl	Cl
320	F	Cl	S	H	CH_3	CH_3
321	F	Cl	S	CH_3	Ph	CH_3
322	F	Cl	S	C_2H_5	Ph-4-Cl	H
323	F	Cl	$CH=C(Cl)CO_2$	H	H	H
324	F	Cl	$CH_2CH(Cl)CO_2$	H	H	H
325	F	Cl	S	Ph	H	H
326	F	Cl	S	CH_2Ph	CH_3	CH_3
327	F	Cl	S	Ph-4-Cl	H	H
328	Cl	Cl	O	H	H	H
329	Cl	Cl	OCH_2CO_2	H	H	H
330	Cl	Cl	S	H	H	H
331	Cl	Cl	SCH_2CO_2	H	H	H
332	Cl	Cl	$SCH(CH_3)CO_2$	H	H	H
333	Cl	Cl	CO_2	H	H	H
334	H	Cl	O	H	H	H
335	H	Cl	OCH_2CO_2	H	H	H
336	H	Cl	S	H	H	H
337	H	Cl	SCH_2CO_2	H	H	H
338	H	Cl	CO_2	H	H	H

Table 4

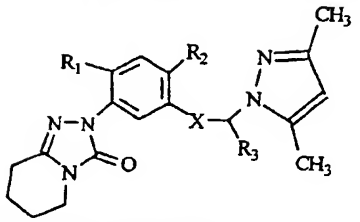


where A=B=N, R_4=R_5=H and Q=Q2 in a compound of formula I

No	R_1	R_2	X	R_3
339	F	Cl	CO_2	H
340	F	Cl	CO_2	CH_3
341	F	Cl	CO_2	C_2H_5
342	F	Cl	CO_2	Ph
343	F	Cl	CO_2	CH_2Ph
344	F	Cl	CO_2	Ph-4-Cl
345	F	Cl	CO_2	CN
346	F	Cl	CO_2	3-Py
347	F	Cl	OCH_2CO_2	H
348	F	Cl	OCH_2CO_2	CH_3
349	F	Cl	OCH_2CO_2	C_2H_5
350	F	Cl	OCH_2CO_2	Ph
351	F	Cl	OCH_2CO_2	CH_2Ph
352	F	Cl	OCH_2CO_2	Ph-4-Cl
353	F	Cl	OCH_2CO_2	CN
354	F	Cl	OCH_2CO_2	3-Py
355	F	Cl	$OCH(CH_3)CO_2$	H
356	F	Cl	$OCH(CH_3)CO_2$	CH_3
357	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
358	F	Cl	$OCH(CH_3)CO_2$	Ph
359	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
360	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
361	F	Cl	$CH=C(Cl)CO_2$	H
362	F	Cl	$CH_2CH(Cl)CO_2$	H
363	F	Cl	O	H
364	F	Cl	O	CH_3
365	F	Cl	O	C_2H_5
366	F	Cl	O	Ph
367	F	Cl	O	CH_2Ph
368	F	Cl	$CH=C(Cl)CO_2$	CN
369	F	Cl	$CH_2CH(Cl)CO_2$	CN
370	F	Cl	O	3-Py
371	F	Cl	SCH_2CO_2	H
372	F	Cl	SCH_2CO_2	CH_3
373	F	Cl	SCH_2CO_2	C_2H_5
374	F	Cl	SCH_2CO_2	Ph

375	F	Cl	SCH_2CO_2	CH_2Ph
376	F	Cl	SCH_2CO_2	Ph-4-Cl
377	F	Cl	SCH_2CO_2	CN
378	F	Cl	SCH_2CO_2	3-Py
379	F	H	$SCH(CH_3)CO_2$	H
380	F	Cl	$SCH(CH_3)CO_2$	CH_3
381	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
382	F	Cl	$SCH(CH_3)CO_2$	Ph
383	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
384	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
385	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
386	F	Cl	$SCH(CH_3)CO_2$	3-Py
387	F	Cl	S	H
388	F	Cl	S	CH_3
389	F	Cl	S	C_2H_5
390	F	Cl	S	Ph
391	F	Cl	S	CH_2Ph
392	F	Cl	S	Ph-4-Cl
393	F	Cl	S	CH_2Ph-4-Cl
394	F	Cl	S	3-Py
395	Cl	Cl	O	H
396	Cl	Cl	OCH_2CO_2	H
397	Cl	Cl	$OCH(CH_3)CO_2$	H
398	Cl	Cl	$CH=C(Cl)CO_2$	H
399	Cl	Cl	$CH_2CH(Cl)CO_2$	H
400	Cl	Cl	S	H
401	Cl	Cl	SCH_2CO_2	H
402	Cl	Cl	$SCH(CH_3)CO_2$	H
403	Cl	Cl	CO_2	H
404	H	Cl	O	H
405	H	Cl	OCH_2CO_2	H
406	H	Cl	$OCH(CH_3)CO_2$	H
407	H	Cl	$CH=C(Cl)CO_2$	H
408	H	Cl	$CH_2CH(Cl)CO_2$	H
409	H	Cl	S	H
410	H	Cl	SCH_2CO_2	H
411	H	Cl	$SCH(CH_3)CO_2$	H
412	H	Cl	$CH=C(Cl)CO_2$	H
413	H	Cl	$CH_2CH(Cl)CO_2$	H
414	H	Cl	CO_2	H
415	F	Cl	OCH_2CO_2	Ph-4-F
416	F	Cl	SCH_2CO_2	Ph-4-F

Table 5

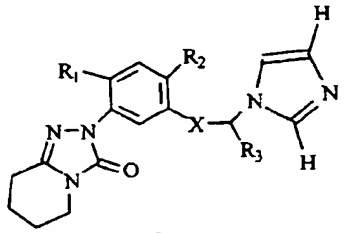


where A=N, B=CH, R_4=R_5=CH_3, Q=Q2 in a compound of formula I

No	R_1	R_2	X	R_3
417	F	Cl	CO_2	H
418	F	Cl	CO_2	CH_3
419	F	Cl	CO_2	C_2H_5
420	F	Cl	CO_2	Ph
421	F	Cl	CO_2	CH_2Ph
422	F	Cl	CO_2	Ph-4-Cl
423	F	Cl	CO_2	CN
424	F	Cl	CO_2	3-Py
425	F	Cl	OCH_2CO_2	H
426	F	Cl	OCH_2CO_2	CH_3
427	F	Cl	OCH_2CO_2	C_2H_5
428	F	Cl	OCH_2CO_2	Ph
429	F	Cl	OCH_2CO_2	CH_2Ph
430	F	Cl	OCH_2CO_2	Ph-4-Cl
431	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
432	F	Cl	OCH_2CO_2	3-Py
433	F	Cl	$OCH(CH_3)CO_2$	H
434	F	Cl	$OCH(CH_3)CO_2$	CH_3
435	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
436	F	Cl	$OCH(CH_3)CO_2$	Ph
437	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
438	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
439	F	Cl	$OCH(CH_3)CO_2$	CN
440	F	Cl	$OCH(CH_3)CO_2$	3-Py
441	F	Cl	O	H
442	F	Cl	O	CH_3
443	F	Cl	O	C_2H_5
444	F	Cl	O	Ph
445	F	Cl	O	CH_2Ph
446	F	Cl	O	Ph-4-Cl
447	F	Cl	O	CH_2Ph-4-Cl
448	F	Cl	O	3-Py
449	F	Cl	SCH_2CO_2	H
450	F	Cl	SCH_2CO_2	CH_3
451	F	Cl	SCH_2CO_2	C_2H_5
452	F	Cl	SCH_2CO_2	Ph

453	F	Cl	SCH_2CO_2	CH_2Ph
454	F	Cl	SCH_2CO_2	Ph-4-Cl
455	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
456	F	Cl	SCH_2CO_2	3-Py
457	F	Cl	$SCH(CH_3)CO_2$	H
458	F	Cl	$SCH(CH_3)CO_2$	CH_3
459	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
460	F	Cl	$SCH(CH_3)CO_2$	Ph
461	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
462	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
463	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
464	F	Cl	$SCH(CH_3)CO_2$	3-Py
465	F	Cl	S	H
466	F	Cl	S	CH_3
467	F	Cl	S	C_2H_5
468	F	Cl	S	Ph
469	F	Cl	S	CH_2Ph
470	F	Cl	S	Ph-4-Cl
471	F	Cl	S	CH_2Ph-4-Cl
472	F	Cl	S	3-Py
473	Cl	Cl	O	H
474	Cl	Cl	OCH_2CO_2	H
475	Cl	Cl	S	H
476	Cl	Cl	SCH_2CO_2	H
477	Cl	Cl	$SCH(CH_3)CO_2$	H
478	Cl	Cl	CO_2	H
479	H	Cl	O	H
480	H	Cl	OCH_2CO_2	H
481	H	Cl	S	H
482	H	Cl	SCH_2CO_2	H
483	H	Cl	CO_2	H

Table 6



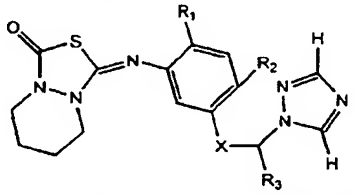
where A=CH, B=N, R_4=R_5=H, Q=Q2 in a compound of formula I

No	R_1	R_2	X	R_3
484	F	Cl	CO_2	H
485	F	Cl	CO_2	CH_3
486	F	Cl	CO_2	C_2H_5
487	F	Cl	CO_2	Ph

488	F	Cl	CO_2	CH_2Ph
489	F	Cl	CO_2	Ph-4-Cl
490	F	Cl	CO_2	CH_2Ph-4-Cl
491	F	Cl	CO_2	3-Py
492	F	Cl	OCH_2CO_2	H
493	F	Cl	OCH_2CO_2	CH_3
494	F	Cl	OCH_2CO_2	C_2H_5
495	F	Cl	OCH_2CO_2	Ph
496	F	Cl	OCH_2CO_2	CH_2Ph
497	F	Cl	OCH_2CO_2	CN
498	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
499	F	Cl	OCH_2CO_2	3-Py
500	F	Cl	$OCH(CH_3)CO_2$	H
501	F	Cl	$OCH(CH_3)CO_2$	CH_3
502	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
503	F	Cl	$OCH(CH_3)CO_2$	Ph
504	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
505	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
506	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
507	F	Cl	$OCH(CH_3)CO_2$	3-Py
508	F	Cl	O	H
509	F	Cl	O	CH_3
510	F	Cl	O	C_2H_5
511	F	Cl	O	Ph
512	F	Cl	O	CH_2Ph
513	F	Cl	O	Ph-4-Cl
514	F	Cl	O	CH_2Ph-4-Cl
515	F	Cl	O	3-Py
516	F	Cl	SCH_2CO_2	H
517	F	Cl	SCH_2CO_2	CH_3
518	F	Cl	SCH_2CO_2	C_2H_5
519	F	Cl	SCH_2CO_2	Ph
520	F	Cl	SCH_2CO_2	CH_2Ph
521	F	Cl	SCH_2CO_2	Ph-4-Cl
522	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
523	F	Cl	SCH_2CO_2	3-Py
524	F	Cl	$SCH(CH_3)CO_2$	H
525	F	Cl	$SCH(CH_3)CO_2$	CH_3
526	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
527	F	Cl	$SCH(CH_3)CO_2$	Ph
528	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
529	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
530	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
531	F	Cl	$SCH(CH_3)CO_2$	3-Py
532	F	Cl	S	H
533	F	Cl	S	CH_3
534	F	Cl	S	C_2H_5
535	F	Cl	S	Ph

536	F	Cl	S	CH_2Ph
537	F	Cl	S	Ph-4-Cl
538	F	Cl	S	CH_2Ph-4-Cl
539	F	Cl	S	3-Py
540	Cl	Cl	O	H
541	Cl	Cl	OCH_2CO_2	H
542	Cl	Cl	S	H
543	Cl	Cl	SCH_2CO_2	H
544	Cl	Cl	$SCH(CH_3)CO_2$	H
545	Cl	Cl	CO_2	H
546	H	Cl	O	H
547	H	Cl	OCH_2CO_2	H
548	H	Cl	S	H
549	H	Cl	SCH_2CO_2	H
550	H	Cl	CO_2	H

Table 7



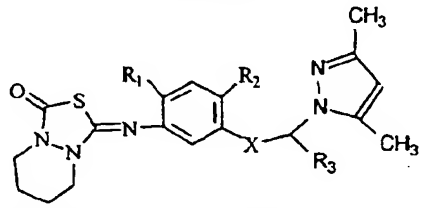
where A=B=N, R_4=R_5=H, Q=Q3 in a compound of formula I

No	R_1	R_2	X	R_3
551	F	Cl	CO_2	H
552	F	Cl	CO_2	CH_3
553	F	Cl	CO_2	C_2H_5
554	F	Cl	CO_2	Ph
555	F	Cl	CO_2	CH_2Ph
556	F	Cl	CO_2	Ph-4-Cl
557	F	Cl	CO_2	CN
558	F	Cl	CO_2	3-Py
559	F	Cl	OCH_2CO_2	H
560	F	Cl	OCH_2CO_2	CH_3
561	F	Cl	OCH_2CO_2	C_2H_5
562	F	Cl	OCH_2CO_2	Ph
563	F	Cl	OCH_2CO_2	CH_2Ph
564	F	Cl	OCH_2CO_2	Ph-4-Cl
565	F	Cl	OCH_2CO_2	CN
566	F	Cl	OCH_2CO_2	3-Py
567	F	Cl	$OCH(CH_3)CO_2$	H
568	F	Cl	$OCH(CH_3)CO_2$	CH_3
569	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
570	F	Cl	$OCH(CH_3)CO_2$	Ph
571	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph

572	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
573	F	Cl	$OCH(CH_3)CO_2$	CN
574	F	Cl	$OCH(CH_3)CO_2$	3-Py
575	F	Cl	O	H
576	F	Cl	O	CH_3
577	F	Cl	O	C_2H_5
578	F	Cl	O	Ph
579	F	Cl	O	CH_2Ph
580	F	Cl	O	Ph-4-Cl
581	F	Cl	O	CH_2Ph-4-Cl
582	F	Cl	O	3-Py
583	F	Cl	SCH_2CO_2	H
584	F	Cl	SCH_2CO_2	CH_3
585	F	Cl	SCH_2CO_2	C_2H_5
586	F	Cl	SCH_2CO_2	Ph
587	F	Cl	SCH_2CO_2	CH_2Ph
588	F	Cl	SCH_2CO_2	Ph-4-Cl
589	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
590	F	Cl	SCH_2CO_2	3-Py
591	F	H	$SCH(CH_3)CO_2$	H
592	F	Cl	$SCH(CH_3)CO_2$	CH_3
593	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
594	F	Cl	$SCH(CH_3)CO_2$	Ph
595	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
596	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
597	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
598	F	Cl	$SCH(CH_3)CO_2$	3-Py
599	F	Cl	S	H
600	F	Cl	S	CH_3
601	F	Cl	S	C_2H_5
602	F	Cl	S	Ph
603	F	Cl	S	CH_2Ph
604	F	Cl	S	Ph-4-Cl
605	F	Cl	S	CH_2Ph-4-Cl
606	F	Cl	S	3-Py
607	F	Cl	$CH=C(Cl)CO_2$	H
608	F	Cl	$CH_2CH(Cl)CO_2$	H
609	Cl	Cl	O	H
610	Cl	Cl	OCH_2CO_2	H
611	Cl	Cl	$CH=C(Cl)CO_2$	H
612	Cl	Cl	$CH_2CH(Cl)CO_2$	H
613	Cl	Cl	SCH_2CO_2	H
614	Cl	Cl	$SCH(CH_3)CO_2$	H
615	Cl	Cl	CO_2	H
616	H	Cl	OCH_2CO_2	H
617	H	Cl	$CH=C(Cl)CO_2$	H
618	H	Cl	$CH_2CH(Cl)CO_2$	H
619	H	Cl	S	H

620	H	Cl	SCH_2CO_2	H
621	H	Cl	$SCH(CH_3)CO_2$	H
622	H	Cl	CO_2	H
623	F	Cl	OCH_2CO_2	Ph-4-F
624	F	Cl	SCH_2CO_2	Ph-4-F

Table 8

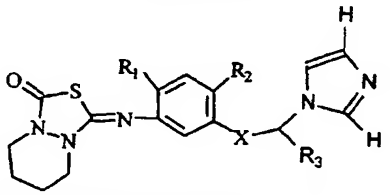


where A=N, B=CH, R_4=R_5=CH_3, Q=Q3 in a compound of formula I

No	R_1	R_2	X	R_3
625	F	Cl	CO_2	H
626	F	Cl	CO_2	CH_3
627	F	Cl	CO_2	C_2H_5
628	F	Cl	CO_2	Ph
629	F	Cl	CO_2	CH_2Ph
630	F	Cl	CO_2	Ph-4-Cl
631	F	Cl	CO_2	CH_2Ph-4-Cl
632	F	Cl	CO_2	3-Py
633	F	Cl	OCH_2CO_2	H
634	F	Cl	OCH_2CO_2	CH_3
635	F	Cl	OCH_2CO_2	C_2H_5
636	F	Cl	OCH_2CO_2	Ph
637	F	Cl	OCH_2CO_2	CH_2Ph
638	F	Cl	OCH_2CO_2	Ph-4-Cl
639	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
640	F	Cl	OCH_2CO_2	3-Py
641	F	Cl	$OCH(CH_3)CO_2$	H
642	F	Cl	$OCH(CH_3)CO_2$	CH_3
643	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
644	F	Cl	$OCH(CH_3)CO_2$	Ph
645	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
646	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
647	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
648	F	Cl	$OCH(CH_3)CO_2$	3-Py
649	F	Cl	O	H
650	F	Cl	O	CH_3
651	F	Cl	O	C_2H_5
652	F	Cl	O	Ph
653	F	Cl	O	CH_2Ph
654	F	Cl	O	Ph-4-Cl
655	F	Cl	O	CH_2Ph-4-Cl

656	F	Cl	O	3-Py
657	F	Cl	SCH_2CO_2	H
658	F	Cl	SCH_2CO_2	CH_3
659	F	Cl	SCH_2CO_2	C_2H_5
660	F	Cl	SCH_2CO_2	Ph
661	F	Cl	SCH_2CO_2	CH_2Ph
662	F	Cl	SCH_2CO_2	Ph-4-Cl
663	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
664	F	Cl	SCH_2CO_2	3-Py
665	F	Cl	$SCH(CH_3)CO_2$	H
666	F	Cl	$SCH(CH_3)CO_2$	CH_3
667	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
668	F	Cl	$SCH(CH_3)CO_2$	Ph
669	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
670	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
671	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
672	F	Cl	$SCH(CH_3)CO_2$	3-Py
673	F	Cl	S	H
674	F	Cl	S	CH_3
675	F	Cl	S	C_2H_5
676	F	Cl	S	Ph
677	F	Cl	S	CH_2Ph
678	F	Cl	S	Ph-4-Cl
679	F	Cl	S	CH_2Ph-4-Cl
680	F	Cl	S	3-Py

Table 9

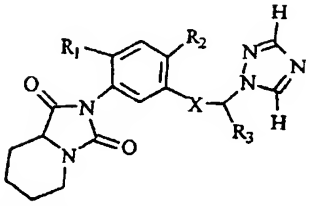


where A=CH, B=N, R_4=R_5=H, Q=Q3 in a compound of formula I

No	R_1	R_2	X	R_3
681	F	Cl	CO_2	H
682	F	Cl	CO_2	CH_3
683	F	Cl	CO_2	C_2H_5
684	F	Cl	CO_2	Ph
685	F	Cl	CO_2	CH_2Ph
686	F	Cl	CO_2	Ph-4-Cl
687	F	Cl	CO_2	CH_2Ph-4-Cl
688	F	Cl	CO_2	3-Py
689	F	Cl	OCH_2CO_2	H
690	F	Cl	OCH_2CO_2	CH_3
691	F	Cl	OCH_2CO_2	C_2H_5

692	F	Cl	OCH_2CO_2	Ph
693	F	Cl	OCH_2CO_2	CH_2Ph
694	F	Cl	OCH_2CO_2	Ph-4-Cl
695	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
696	F	Cl	OCH_2CO_2	3-Py
697	F	Cl	$OCH(CH_3)CO_2$	H
698	F	Cl	$OCH(CH_3)CO_2$	CH_3
699	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
700	F	Cl	$OCH(CH_3)CO_2$	Ph
701	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
702	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
703	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
704	F	Cl	$OCH(CH_3)CO_2$	3-Py
705	F	Cl	O	H
706	F	Cl	O	CH_3
707	F	Cl	O	C_2H_5
708	F	Cl	O	Ph
709	F	Cl	O	CH_2Ph
710	F	Cl	O	Ph-4-Cl
711	F	Cl	O	CH_2Ph-4-Cl
712	F	Cl	O	3-Py
713	F	Cl	SCH_2CO_2	H
714	F	Cl	SCH_2CO_2	CH_3
715	F	Cl	SCH_2CO_2	C_2H_5
716	F	Cl	SCH_2CO_2	Ph
717	F	Cl	SCH_2CO_2	CH_2Ph
718	F	Cl	SCH_2CO_2	Ph-4-Cl
719	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
720	F	Cl	SCH_2CO_2	3-Py
721	F	Cl	$SCH(CH_3)CO_2$	H
722	F	Cl	$SCH(CH_3)CO_2$	CH_3
723	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
724	F	Cl	$SCH(CH_3)CO_2$	Ph
725	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
726	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
727	F	Cl	S	H
728	F	Cl	S	CH_3
729	F	Cl	S	C_2H_5
730	F	Cl	S	Ph
731	F	Cl	S	CH_2Ph
732	F	Cl	S	Ph-4-Cl
733	F	Cl	S	CH_2Ph-4-Cl
734	F	Cl	S	3-Py

Table 10

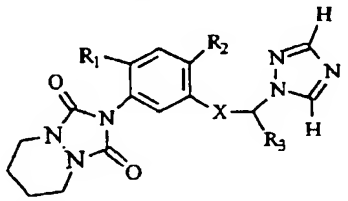


where A=B=N, R_4=R_5=H, Q=Q4 in a compound of formula I

No	R_1	R_2	X	R_3
735	F	Cl	CO_2	H
736	F	Cl	CO_2	CH_3
737	F	Cl	CO_2	C_2H_5
738	F	Cl	CO_2	Ph
739	F	Cl	CO_2	CH_2Ph
740	F	Cl	CO_2	Ph-4-Cl
741	F	Cl	CO_2	CN
742	F	Cl	CO_2	3-Py
743	F	Cl	OCH_2CO_2	H
744	F	Cl	OCH_2CO_2	CH_3
745	F	Cl	OCH_2CO_2	C_2H_5
746	F	Cl	OCH_2CO_2	Ph
747	F	Cl	OCH_2CO_2	CH_2Ph
748	F	Cl	OCH_2CO_2	Ph-4-Cl
749	F	Cl	OCH_2CO_2	CN
750	F	Cl	OCH_2CO_2	3-Py
751	F	Cl	$OCH(CH_3)CO_2$	H
752	F	Cl	$OCH(CH_3)CO_2$	CH_3
753	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
754	F	Cl	$OCH(CH_3)CO_2$	Ph
755	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
756	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
757	F	Cl	$OCH(CH_3)CO_2$	CN
758	F	Cl	$OCH(CH_3)CO_2$	3-Py
759	F	Cl	O	H
760	F	Cl	O	CH_3
761	F	Cl	O	C_2H_5
762	F	Cl	O	Ph
763	F	Cl	O	CH_2Ph
764	F	Cl	O	Ph-4-Cl
765	F	Cl	O	CN
766	F	Cl	O	3-Py
767	F	Cl	SCH_2CO_2	H
768	F	Cl	SCH_2CO_2	CH_3
769	F	Cl	SCH_2CO_2	C_2H_5
770	F	Cl	SCH_2CO_2	Ph
771	F	Cl	SCH_2CO_2	CH_2Ph

772	F	Cl	SCH_2CO_2	Ph-4-Cl
773	F	Cl	SCH_2CO_2	CN
774	F	Cl	SCH_2CO_2	3-Py
775	F	H	$SCH(CH_3)CO_2$	H
776	F	Cl	$SCH(CH_3)CO_2$	CH_3
777	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
778	F	Cl	$SCH(CH_3)CO_2$	Ph
779	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
780	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
781	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
782	F	Cl	$SCH(CH_3)CO_2$	3-Py
783	F	Cl	S	H
784	F	Cl	S	CH_3
785	F	Cl	S	C_2H_5
786	F	Cl	S	Ph
787	F	Cl	$CH=C(Cl)CO_2$	CN
788	F	Cl	$CH_2CH(Cl)CO_2$	CN
789	F	Cl	$CH=C(Cl)CO_2$	H
790	F	Cl	$CH_2CH(Cl)CO_2$	H
791	Cl	Cl	O	H
792	Cl	Cl	OCH_2CO_2	H
793	Cl	Cl	$OCH(CH_3)CO_2$	H
794	Cl	Cl	SCH_2CO_2	H
795	Cl	Cl	$CH=C(Cl)CO_2$	H
796	Cl	Cl	$CH_2CH(Cl)CO_2$	H
797	Cl	Cl	CO_2	H
798	H	Cl	O	H
799	H	Cl	OCH_2CO_2	H
800	H	Cl	$OCH(CH_3)CO_2$	H
801	H	Cl	SCH_2CO_2	H
802	H	Cl	$CH=C(Cl)CO_2$	H
803	H	Cl	$CH_2CH(Cl)CO_2$	H
804	H	Cl	CO_2	H
805	F	Cl	OCH_2CO_2	Ph-4-F
806	F	Cl	SCH_2CO_2	Ph-4-F

Table 11



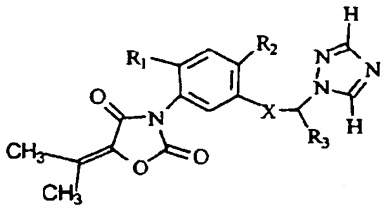
where A=B=N, R_4=R_5=H, Q=Q5 in a compound of formula I

No	R_1	R_2	X	R_3
807	F	Cl	CO_2	H

808	F	Cl	CO_2	CH_3
809	F	Cl	CO_2	C_2H_5
810	F	Cl	CO_2	Ph
811	F	Cl	CO_2	CH_2Ph
812	F	Cl	CO_2	Ph-4-Cl
813	F	Cl	CO_2	CN
814	F	Cl	CO_2	3-Py
815	F	Cl	OCH_2CO_2	H
816	F	Cl	OCH_2CO_2	CH_3
817	F	Cl	OCH_2CO_2	C_2H_5
818	F	Cl	OCH_2CO_2	Ph
819	F	Cl	OCH_2CO_2	CH_2Ph
820	F	Cl	OCH_2CO_2	Ph-4-Cl
821	F	Cl	OCH_2CO_2	CN
822	F	Cl	OCH_2CO_2	3-Py
823	F	Cl	$OCH(CH_3)CO_2$	H
824	F	Cl	$OCH(CH_3)CO_2$	CH_3
825	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
826	F	Cl	$OCH(CH_3)CO_2$	Ph
827	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
828	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
829	F	Cl	$OCH(CH_3)CO_2$	CN
830	F	Cl	$OCH(CH_3)CO_2$	3-Py
831	F	Cl	O	H
832	F	Cl	O	CH_3
833	F	Cl	O	C_2H_5
834	F	Cl	O	Ph
835	F	Cl	O	CH_2Ph
836	F	Cl	O	Ph-4-Cl
837	F	Cl	O	CN
838	F	Cl	O	3-Py
839	F	Cl	SCH_2CO_2	H
840	F	Cl	SCH_2CO_2	CH_3
841	F	Cl	SCH_2CO_2	C_2H_5
842	F	Cl	SCH_2CO_2	Ph
843	F	Cl	SCH_2CO_2	CH_2Ph
844	F	Cl	SCH_2CO_2	Ph-4-Cl
845	F	Cl	SCH_2CO_2	CN
846	F	Cl	SCH_2CO_2	3-Py
847	F	H	$SCH(CH_3)CO_2$	H
848	F	Cl	$SCH(CH_3)CO_2$	CH_3
849	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
850	F	Cl	$SCH(CH_3)CO_2$	Ph
851	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
852	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
853	F	Cl	$SCH(CH_3)CO_2$	CN
854	F	Cl	$SCH(CH_3)CO_2$	3-Py
855	F	Cl	S	H

856	F	Cl	S	CH_3
857	F	Cl	S	C_2H_5
858	F	Cl	S	Ph
859	F	Cl	S	CH_2Ph
860	F	Cl	S	Ph-4-Cl
861	F	Cl	$CH=C(Cl)CO_2$	H
862	F	Cl	$CH_2CH(Cl)CO_2$	H
863	Cl	Cl	O	H
864	Cl	Cl	OCH_2CO_2	H
865	Cl	Cl	$OCH(CH_3)CO_2$	H
866	Cl	Cl	SCH_2CO_2	H
867	Cl	Cl	$CH=C(Cl)CO_2$	H
868	Cl	Cl	$CH_2CH(Cl)CO_2$	H
869	Cl	Cl	CO_2	H
870	H	Cl	O	H
871	H	Cl	OCH_2CO_2	H
872	H	Cl	$OCH(CH_3)CO_2$	H
873	H	Cl	SCH_2CO_2	H
874	H	Cl	$CH=C(Cl)CO_2$	H
875	H	Cl	$CH_2CH(Cl)CO_2$	H
876	H	Cl	CO_2	H
877	F	Cl	OCH_2CO_2	Ph-4-F
878	F	Cl	SCH_2CO_2	Ph-4-F

Table 12



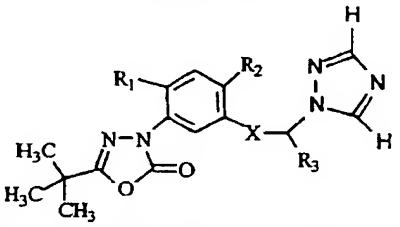
where A=B=N, R_4=R_5=H, Q=Q6 in a compound of formula I

No	R_1	R_2	X	R_3
879	F	Cl	CO_2	H
880	F	Cl	CO_2	CH_3
881	F	Cl	CO_2	C_2H_5
882	F	Cl	CO_2	Ph
883	F	Cl	CO_2	CH_2Ph
884	F	Cl	CO_2	Ph-4-Cl
885	F	Cl	CO_2	CN
886	F	Cl	CO_2	3-Py
887	F	Cl	OCH_2CO_2	H
888	F	Cl	OCH_2CO_2	CH_3
889	F	Cl	OCH_2CO_2	C_2H_5
890	F	Cl	OCH_2CO_2	Ph

891	F	Cl	OCH_2CO_2	CH_2Ph
892	F	Cl	OCH_2CO_2	Ph-4-Cl
893	F	Cl	OCH_2CO_2	CN
894	F	Cl	OCH_2CO_2	3-Py
895	F	Cl	$OCH(CH_3)CO_2$	H
896	F	Cl	$OCH(CH_3)CO_2$	CH_3
897	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
898	F	Cl	$OCH(CH_3)CO_2$	Ph
899	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
900	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
901	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
902	F	Cl	$OCH(CH_3)CO_2$	3-Py
903	F	Cl	O	H
904	F	Cl	O	CH_3
905	F	Cl	O	C_2H_5
906	F	Cl	O	Ph
907	F	Cl	O	CH_2Ph
908	F	Cl	O	Ph-4-Cl
909	F	Cl	O	CN
910	F	Cl	O	3-Py
911	F	Cl	SCH_2CO_2	H
912	F	Cl	SCH_2CO_2	CH_3
913	F	Cl	SCH_2CO_2	C_2H_5
914	F	Cl	SCH_2CO_2	Ph
915	F	Cl	SCH_2CO_2	CH_2Ph
916	F	Cl	SCH_2CO_2	Ph-4-Cl
917	F	Cl	SCH_2CO_2	CN
918	F	Cl	SCH_2CO_2	3-Py
919	F	H	$SCH(CH_3)CO_2$	H
920	F	Cl	$SCH(CH_3)CO_2$	CH_3
921	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
922	F	Cl	$SCH(CH_3)CO_2$	Ph
923	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
924	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
925	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
926	F	Cl	$SCH(CH_3)CO_2$	3-Py
927	F	Cl	S	H
928	F	Cl	S	CH_3
929	F	Cl	S	C_2H_5
930	F	Cl	S	Ph
931	F	Cl	S	CH_2Ph
932	F	Cl	S	Ph-4-Cl
933	F	Cl	$CH=C(Cl)CO_2$	H
934	F	Cl	$CH_2CH(Cl)CO_2$	H
935	Cl	Cl	O	H
936	Cl	Cl	OCH_2CO_2	H
937	Cl	Cl	$CH=C(Cl)CO_2$	H
938	Cl	Cl	$CH_2CH(Cl)CO_2$	H

939	Cl	Cl	SCH_2CO_2	H
940	Cl	Cl	$SCH(CH_3)CO_2$	H
941	Cl	Cl	CO_2	H
942	H	Cl	O	H
943	H	Cl	OCH_2CO_2	H
944	H	Cl	$OCH(CH_3)CO_2$	H
945	H	Cl	SCH_2CO_2	H
946	H	Cl	$CH=C(Cl)CO_2$	H
947	H	Cl	$CH_2CH(Cl)CO_2$	H
948	H	Cl	CO_2	H
949	F	Cl	OCH_2CO_2	Ph-4-F
950	F	Cl	SCH_2CO_2	Ph-4-F

Table 13



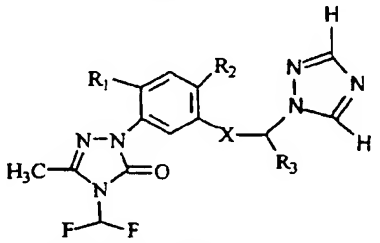
where A=B=N, R_4=R_5=H, Q=Q7 in a compound of formula I

No	R_1	R_2	X	R_3
951	F	Cl	CO_2	H
952	F	Cl	CO_2	CH_3
953	F	Cl	CO_2	C_2H_5
954	F	Cl	CO_2	Ph
955	F	Cl	CO_2	CH_2Ph
956	F	Cl	CO_2	Ph-4-Cl
957	F	Cl	CO_2	CN
958	F	Cl	CO_2	3-Py
959	F	Cl	OCH_2CO_2	H
960	F	Cl	OCH_2CO_2	CH_3
961	F	Cl	OCH_2CO_2	C_2H_5
962	F	Cl	OCH_2CO_2	Ph
963	F	Cl	OCH_2CO_2	CH_2Ph
964	F	Cl	OCH_2CO_2	Ph-4-Cl
965	F	Cl	OCH_2CO_2	CN
966	F	Cl	OCH_2CO_2	3-Py
967	F	Cl	$OCH(CH_3)CO_2$	H
968	F	Cl	$OCH(CH_3)CO_2$	CH_3
969	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
970	F	Cl	$OCH(CH_3)CO_2$	Ph
971	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
972	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
973	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl

974	F	Cl	$OCH(CH_3)CO_2$	3-Py
975	F	Cl	O	H
976	F	Cl	O	CH_3
977	F	Cl	O	C_2H_5
978	F	Cl	O	Ph
979	F	Cl	O	CH_2Ph
980	F	Cl	O	Ph-4-Cl
981	F	Cl	O	CN
982	F	Cl	O	3-Py
983	F	Cl	SCH_2CO_2	H
984	F	Cl	SCH_2CO_2	CH_3
985	F	Cl	SCH_2CO_2	C_2H_5
986	F	Cl	SCH_2CO_2	Ph
987	F	Cl	SCH_2CO_2	CH_2Ph
988	F	Cl	SCH_2CO_2	Ph-4-Cl
989	F	Cl	SCH_2CO_2	CN
990	F	Cl	SCH_2CO_2	3-Py
991	F	H	$SCH(CH_3)CO_2$	H
992	F	Cl	$SCH(CH_3)CO_2$	CH_3
993	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
994	F	Cl	$SCH(CH_3)CO_2$	Ph
995	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
996	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
997	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
998	F	Cl	$SCH(CH_3)CO_2$	3-Py
999	F	Cl	S	H
1000	F	Cl	S	CH_3
1001	F	Cl	S	C_2H_5
1002	F	Cl	S	Ph
1003	F	Cl	S	CH_2Ph
1004	F	Cl	S	Ph-4-Cl
1005	F	Cl	$CH=C(Cl)CO_2$	H
1006	F	Cl	$CH_2CH(Cl)CO_2$	H
1007	Cl	Cl	O	H
1008	Cl	Cl	OCH_2CO_2	H
1009	Cl	Cl	$CH=C(Cl)CO_2$	H
1010	Cl	Cl	$CH_2CH(Cl)CO_2$	H
1011	Cl	Cl	SCH_2CO_2	H
1012	Cl	Cl	$SCH(CH_3)CO_2$	H
1013	Cl	Cl	CO_2	H
1014	H	Cl	O	H
1015	H	Cl	OCH_2CO_2	H
1016	H	Cl	$OCH(CH_3)CO_2$	H
1017	H	Cl	SCH_2CO_2	H
1018	H	Cl	$CH=C(Cl)CO_2$	H
1019	H	Cl	$CH_2CH(Cl)CO_2$	H
1020	H	Cl	CO_2	H
1021	F	Cl	OCH_2CO_2	Ph-4-F

1022	F	Cl	SCH_2CO_2	Ph-4-F

Table 14

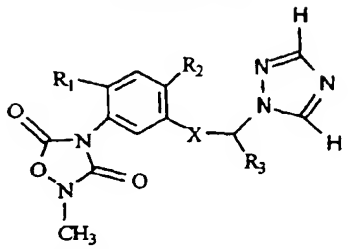


where A=B=N, R_4=R_5=H, Q=Q8 in a compound of formula I

No	R_1	R_2	X	R_3
1023	F	Cl	CO_2	H
1024	F	Cl	CO_2	CH_3
1025	F	Cl	CO_2	C_2H_5
1026	F	Cl	CO_2	Ph
1027	F	Cl	CO_2	CH_2Ph
1028	F	Cl	CO_2	Ph-4-Cl
1029	F	Cl	CO_2	CN
1030	F	Cl	CO_2	3-Py
1031	F	Cl	OCH_2CO_2	H
1032	F	Cl	OCH_2CO_2	CH_3
1033	F	Cl	OCH_2CO_2	C_2H_5
1034	F	Cl	OCH_2CO_2	Ph
1035	F	Cl	OCH_2CO_2	CH_2Ph
1036	F	Cl	OCH_2CO_2	Ph-4-Cl
1037	F	Cl	OCH_2CO_2	CN
1038	F	Cl	OCH_2CO_2	3-Py
1039	F	Cl	$OCH(CH_3)CO_2$	H
1040	F	Cl	$OCH(CH_3)CO_2$	CH_3
1041	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
1042	F	Cl	$OCH(CH_3)CO_2$	Ph
1043	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
1044	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
1045	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
1046	F	Cl	$OCH(CH_3)CO_2$	3-Py
1047	F	Cl	O	H
1048	F	Cl	O	CH_3
1049	F	Cl	O	C_2H_5
1050	F	Cl	O	Ph
1051	F	Cl	O	CH_2Ph
1052	F	Cl	O	Ph-4-Cl
1053	F	Cl	O	CH_2Ph-4-Cl
1054	F	Cl	O	3-Py
1055	F	Cl	SCH_2CO_2	H

1056	F	Cl	SCH_2CO_2	CH_3
1057	F	Cl	SCH_2CO_2	C_2H_5
1058	F	Cl	SCH_2CO_2	Ph
1059	F	Cl	SCH_2CO_2	CH_2Ph
1060	F	Cl	SCH_2CO_2	Ph-4-Cl
1061	F	Cl	SCH_2CO_2	CN
1062	F	Cl	SCH_2CO_2	3-Py
1063	F	H	$SCH(CH_3)CO_2$	H
1064	F	Cl	$SCH(CH_3)CO_2$	CH_3
1065	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
1066	F	Cl	$SCH(CH_3)CO_2$	Ph
1067	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
1068	F	Cl	$CH=C(Cl)CO_2$	CN
1069	F	Cl	$CH_2CH(Cl)CO_2$	CN
1070	F	Cl	$SCH(CH_3)CO_2$	3-Py
1071	F	Cl	S	H
1072	F	Cl	S	CH_3
1073	F	Cl	S	C_2H_5
1074	F	Cl	S	Ph
1075	F	Cl	S	CH_2Ph
1076	F	Cl	S	Ph-4-Cl
1077	F	Cl	$CH=C(Cl)CO_2$	H
1078	F	Cl	$CH_2CH(Cl)CO_2$	H
1079	Cl	Cl	O	H
1080	Cl	Cl	OCH_2CO_2	H
1081	Cl	Cl	$CH=C(Cl)CO_2$	H
1082	Cl	Cl	$CH_2CH(Cl)CO_2$	H
1083	Cl	Cl	SCH_2CO_2	H
1084	Cl	Cl	$SCH(CH_3)CO_2$	H
1085	Cl	Cl	CO_2	H
1086	H	Cl	O	H
1087	H	Cl	OCH_2CO_2	H
1088	H	Cl	$OCH(CH_3)CO_2$	H
1089	H	Cl	SCH_2CO_2	H
1090	H	Cl	$CH=C(Cl)CO_2$	H
1091	H	Cl	$CH_2CH(Cl)CO_2$	H
1092	H	Cl	CO_2	H
1093	F	Cl	OCH_2CO_2	Ph-4-F
1094	F	Cl	SCH_2CO_2	Ph-4-F

Table 15

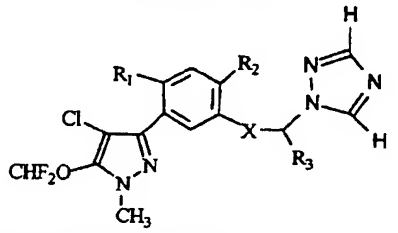


where A=B=N, R_4=R_5=H, Q=Q9 in a compound of formula I

No	R_1	R_2	X	R_3
1095	F	Cl	CO_2	H
1096	F	Cl	CO_2	CH_3
1097	F	Cl	CO_2	C_2H_5
1098	F	Cl	CO_2	Ph
1099	F	Cl	CO_2	CH_2Ph
1100	F	Cl	CO_2	Ph-4-Cl
1101	F	Cl	CO_2	CN
1102	F	Cl	CO_2	3-Py
1103	F	Cl	OCH_2CO_2	H
1104	F	Cl	OCH_2CO_2	CH_3
1105	F	Cl	OCH_2CO_2	C_2H_5
1106	F	Cl	OCH_2CO_2	Ph
1107	F	Cl	OCH_2CO_2	CH_2Ph
1108	F	Cl	OCH_2CO_2	Ph-4-Cl
1109	F	Cl	OCH_2CO_2	CN
1110	F	Cl	OCH_2CO_2	3-Py
1111	F	Cl	$OCH(CH_3)CO_2$	H
1112	F	Cl	$OCH(CH_3)CO_2$	CH_3
1113	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
1114	F	Cl	$OCH(CH_3)CO_2$	Ph
1115	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
1116	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
1117	F	Cl	$OCH(CH_3)CO_2$	CN
1118	F	Cl	$OCH(CH_3)CO_2$	3-Py
1119	F	Cl	O	H
1120	F	Cl	O	CH_3
1121	F	Cl	O	C_2H_5
1122	F	Cl	O	Ph
1123	F	Cl	O	CH_2Ph
1124	F	Cl	O	Ph-4-Cl
1125	F	Cl	O	CN
1126	F	Cl	O	3-Py
1127	F	Cl	SCH_2CO_2	H
1128	F	Cl	SCH_2CO_2	CH_3
1129	F	Cl	SCH_2CO_2	C_2H_5
1130	F	Cl	SCH_2CO_2	Ph

1131	F	Cl	SCH_2CO_2	CH_2Ph
1132	F	Cl	SCH_2CO_2	Ph-4-Cl
1133	F	Cl	SCH_2CO_2	CN
1134	F	Cl	SCH_2CO_2	3-Py
1135	F	H	$SCH(CH_3)CO_2$	H
1136	F	Cl	$SCH(CH_3)CO_2$	CH_3
1137	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
1138	F	Cl	$SCH(CH_3)CO_2$	Ph
1139	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
1140	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
1141	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
1142	F	Cl	$SCH(CH_3)CO_2$	3-Py
1143	F	Cl	S	H
1144	F	Cl	S	CH_3
1145	F	Cl	S	C_2H_5
1146	F	Cl	S	Ph
1147	F	Cl	S	CH_2Ph
1148	F	Cl	S	Ph-4-Cl
1149	F	Cl	$CH=C(Cl)CO_2$	H
1150	F	Cl	$CH_2CH(Cl)CO_2$	H
1151	Cl	Cl	O	H
1152	Cl	Cl	OCH_2CO_2	H
1153	Cl	Cl	$CH=C(Cl)CO_2$	H
1154	Cl	Cl	$CH_2CH(Cl)CO_2$	H
1155	Cl	Cl	SCH_2CO_2	H
1156	Cl	Cl	$SCH(CH_3)CO_2$	H
1157	Cl	Cl	CO_2	H
1158	H	Cl	O	H
1159	H	Cl	OCH_2CO_2	H
1160	H	Cl	$OCH(CH_3)CO_2$	H
1161	H	Cl	SCH_2CO_2	H
1162	H	Cl	$CH=C(Cl)CO_2$	H
1163	H	Cl	$CH_2CH(Cl)CO_2$	H
1164	H	Cl	CO_2	H
1165	F	Cl	OCH_2CO_2	Ph-4-F
1166	F	Cl	SCH_2CO_2	Ph-4-F

Table 16

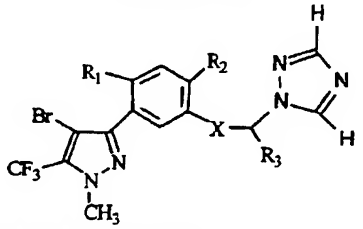


where A=B=N, R_4=R_5=H, Q=Q10 in a compound of formula I

No	R_1	R_2	X	R_3
1167	F	Cl	CO_2	H
1168	F	Cl	CO_2	CH_3
1169	F	Cl	CO_2	C_2H_5
1170	F	Cl	CO_2	Ph
1171	F	Cl	CO_2	CH_2Ph
1172	F	Cl	CO_2	Ph-4-Cl
1173	F	Cl	CO_2	CH_2Ph-4-Cl
1174	F	Cl	CO_2	3-Py
1175	F	Cl	OCH_2CO_2	H
1176	F	Cl	OCH_2CO_2	CH_3
1177	F	Cl	OCH_2CO_2	C_2H_5
1178	F	Cl	OCH_2CO_2	Ph
1179	F	Cl	OCH_2CO_2	CH_2Ph
1180	F	Cl	OCH_2CO_2	Ph-4-Cl
1181	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
1182	F	Cl	OCH_2CO_2	3-Py
1183	F	Cl	$OCH(CH_3)CO_2$	H
1184	F	Cl	$OCH(CH_3)CO_2$	CH_3
1185	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
1186	F	Cl	$OCH(CH_3)CO_2$	Ph
1187	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
1188	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
1189	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
1190	F	Cl	$OCH(CH_3)CO_2$	3-Py
1191	F	Cl	O	H
1192	F	Cl	O	CH_3
1193	F	Cl	O	C_2H_5
1194	F	Cl	O	Ph
1195	F	Cl	O	CH_2Ph
1196	F	Cl	O	Ph-4-Cl
1197	F	Cl	O	CH_2Ph-4-Cl
1198	F	Cl	O	3-Py
1199	F	Cl	SCH_2CO_2	H
1200	F	Cl	SCH_2CO_2	CH_3
1201	F	Cl	SCH_2CO_2	C_2H_5
1202	F	Cl	SCH_2CO_2	Ph
1203	F	Cl	SCH_2CO_2	CH_2Ph
1204	F	Cl	SCH_2CO_2	Ph-4-Cl
1205	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
1206	F	Cl	SCH_2CO_2	3-Py
1207	F	H	$SCH(CH_3)CO_2$	H
1208	F	Cl	$SCH(CH_3)CO_2$	CH_3
1209	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
1210	F	Cl	$SCH(CH_3)CO_2$	Ph
1211	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
1212	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
1213	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl

1214	F	Cl	$SCH(CH_3)CO_2$	3-Py
1215	F	Cl	S	H
1216	F	Cl	S	CH_3
1217	F	Cl	S	C_2H_5
1218	F	Cl	S	Ph
1219	F	Cl	S	CH_2Ph
1220	F	Cl	S	Ph-4-Cl
1221	F	Cl	$CH=C(Cl)CO_2$	H
1222	F	Cl	$CH_2CH(Cl)CO_2$	H
1223	Cl	Cl	O	H
1224	Cl	Cl	OCH_2CO_2	H
1225	Cl	Cl	$CH=C(Cl)CO_2$	H
1226	Cl	Cl	$CH_2CH(Cl)CO_2$	H
1227	Cl	Cl	SCH_2CO_2	H
1228	Cl	Cl	$SCH(CH_3)CO_2$	H
1229	Cl	Cl	CO_2	H
1230	H	Cl	O	H
1231	H	Cl	OCH_2CO_2	H
1232	H	Cl	$OCH(CH_3)CO_2$	H
1233	H	Cl	SCH_2CO_2	H
1234	H	Cl	$CH=C(Cl)CO_2$	H
1235	H	Cl	$CH_2CH(Cl)CO_2$	H
1236	H	Cl	CO_2	H
1237	F	Cl	OCH_2CO_2	Ph-4-F
1238	F	Cl	SCH_2CO_2	Ph-4-F

Table 17



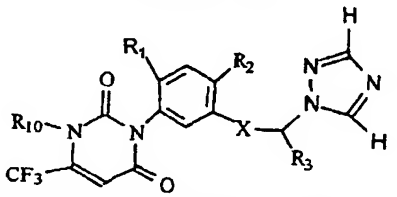
where A=B=N, R_4=R_5=H, Q=Q11 in a compound of formula I

No	R_1	R_2	X	R_3
1239	F	Cl	CO_2	H
1240	F	Cl	CO_2	CH_3
1241	F	Cl	CO_2	C_2H_5
1242	F	Cl	CO_2	Ph
1243	F	Cl	CO_2	CH_2Ph
1244	F	Cl	CO_2	Ph-4-Cl
1245	F	Cl	CO_2	CH_2Ph-4-Cl
1246	F	Cl	CO_2	3-Py
1247	F	Cl	OCH_2CO_2	H
1248	F	Cl	OCH_2CO_2	CH_3

1249	F	Cl	OCH_2CO_2	C_2H_5
1250	F	Cl	OCH_2CO_2	Ph
1251	F	Cl	OCH_2CO_2	CH_2Ph
1252	F	Cl	OCH_2CO_2	Ph-4-Cl
1253	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
1254	F	Cl	OCH_2CO_2	3-Py
1255	F	Cl	$OCH(CH_3)CO_2$	H
1256	F	Cl	$OCH(CH_3)CO_2$	CH_3
1257	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
1258	F	Cl	$OCH(CH_3)CO_2$	Ph
1259	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
1260	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
1261	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl
1262	F	Cl	$OCH(CH_3)CO_2$	3-Py
1263	F	Cl	O	H
1264	F	Cl	O	CH_3
1265	F	Cl	O	C_2H_5
1266	F	Cl	O	Ph
1267	F	Cl	O	CH_2Ph
1268	F	Cl	O	Ph-4-Cl
1269	F	Cl	O	CH_2Ph-4-Cl
1270	F	Cl	O	3-Py
1271	F	Cl	SCH_2CO_2	H
1272	F	Cl	SCH_2CO_2	CH_3
1273	F	Cl	SCH_2CO_2	C_2H_5
1274	F	Cl	SCH_2CO_2	Ph
1275	F	Cl	SCH_2CO_2	CH_2Ph
1276	F	Cl	SCH_2CO_2	Ph-4-Cl
1277	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
1278	F	Cl	SCH_2CO_2	3-Py
1279	F	H	$SCH(CH_3)CO_2$	H
1280	F	Cl	$SCH(CH_3)CO_2$	CH_3
1281	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
1282	F	Cl	$SCH(CH_3)CO_2$	Ph
1283	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
1284	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
1285	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
1286	F	Cl	$SCH(CH_3)CO_2$	3-Py
1287	F	Cl	S	H
1288	F	Cl	S	CH_3
1289	F	Cl	S	C_2H_5
1290	F	Cl	S	Ph
1291	F	Cl	S	CH_2Ph
1292	F	Cl	S	Ph-4-Cl
1293	F	Cl	$CH=C(Cl)CO_2$	H
1294	F	Cl	$CH_2CH(Cl)CO_2$	H
1295	Cl	Cl	O	H
1296	Cl	Cl	OCH_2CO_2	H

1297	Cl	Cl	$CH=C(Cl)CO_2$	H
1298	Cl	Cl	$CH_2CH(Cl)CO_2$	H
1299	Cl	Cl	SCH_2CO_2	H
1300	Cl	Cl	$SCH(CH_3)CO_2$	H
1301	Cl	Cl	CO_2	H
1302	H	Cl	O	H
1303	H	Cl	OCH_2CO_2	H
1304	H	Cl	$OCH(CH_3)CO_2$	H
1305	H	Cl	SCH_2CO_2	H
1306	H	Cl	$CH=C(Cl)CO_2$	H
1307	H	Cl	$CH_2CH(Cl)CO_2$	H
1308	H	Cl	CO_2	H
1309	F	Cl	OCH_2CO_2	Ph-4-F
1310	F	Cl	SCH_2CO_2	Ph-4-F

Table 18



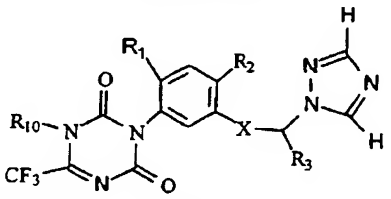
where A=B=N, R_4=R_5=H, Q=Q12 in a compound of formula I

No	R_1	R_2	X	R_3	R_{10}
1311	F	Cl	CO_2	H	CH_3
1312	F	Cl	CO_2	CH_3	CH_3
1313	F	Cl	CO_2	C_2H_5	CH_3
1314	F	Cl	CO_2	H	NH_2
1315	F	Cl	CO_2	CH_3	NH_2
1316	F	Cl	CO_2	C_2H_5	NH_2
1317	F	Cl	CO_2	CN	NH_2
1318	F	Cl	CO_2	CN	CH_3
1319	F	Cl	OCH_2CO_2	H	CH_3
1320	F	Cl	OCH_2CO_2	CH_3	CH_3
1321	F	Cl	OCH_2CO_2	C_2H_5	CH_3
1322	F	Cl	OCH_2CO_2	H	NH_2
1323	F	Cl	OCH_2CO_2	CH_3	NH_2
1324	F	Cl	OCH_2CO_2	C_2H_5	NH_2
1325	F	Cl	OCH_2CO_2	CN	NH_2
1326	F	Cl	OCH_2CO_2	CN	CH_3
1327	F	Cl	$OCH(CH_3)CO_2$	H	CH_3
1328	F	Cl	$OCH(CH_3)CO_2$	CH_3	CH_3
1329	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	CH_3
1330	F	Cl	$OCH(CH_3)CO_2$	H	NH_2
1331	F	Cl	$OCH(CH_3)CO_2$	CH_3	NH_2
1332	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	NH_2

1333	F	Cl	$OCH(CH_3)CO_2$	CN	NH_2
1334	F	Cl	O	H	H
1335	F	Cl	O	H	CH_3
1336	F	Cl	O	CH_3	CH_3
1337	F	Cl	O	C_2H_5	CH_3
1338	F	Cl	O	H	NH_2
1339	F	Cl	O	CH_3	NH_2
1340	F	Cl	O	C_2H_5	NH_2
1341	F	Cl	O	CN	NH_2
1342	F	Cl	O	CN	CH_3
1343	F	Cl	SCH_2CO_2	H	CH_3
1344	F	Cl	SCH_2CO_2	CH_3	CH_3
1345	F	Cl	SCH_2CO_2	C_2H_5	CH_3
1346	F	Cl	SCH_2CO_2	H	NH_2
1347	F	Cl	SCH_2CO_2	CH_3	NH_2
1348	F	Cl	SCH_2CO_2	C_2H_5	NH_2
1349	F	Cl	SCH_2CO_2	CN	NH_2
1350	F	Cl	SCH_2CO_2	CN	CH_3
1351	F	H	$SCH(CH_3)CO_2$	H	CH_3
1352	F	Cl	$SCH(CH_3)CO_2$	CH_3	CH_3
1353	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	CH_3
1354	F	Cl	$SCH(CH_3)CO_2$	H	NH_2
1355	F	Cl	$SCH(CH_3)CO_2$	CH_3	NH_2
1356	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	NH_2
1357	F	Cl	$CH=C(Cl)CO_2$	H	NH_2
1358	F	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1359	F	Cl	$CH=C(Cl)CO_2$	CN	NH_2
1360	F	Cl	$CH_2CH(Cl)CO_2$	CN	NH_2
1361	F	Cl	S	H	CH_3
1362	F	Cl	S	H	NH_2
1363	F	Cl	$CH=C(Cl)CO_2$	H	CH_3
1364	F	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1365	F	Cl	$CH=C(Cl)CO_2$	CN	CH_3
1366	F	Cl	$CH_2CH(Cl)CO_2$	CN	CH_3
1367	Cl	Cl	O	H	NH_2
1368	Cl	Cl	OCH_2CO_2	H	CH_3
1369	Cl	Cl	$OCH(CH_3)CO_2$	H	CH_3
1370	Cl	Cl	SCH_2CO_2	H	CH_3
1371	Cl	Cl	$CH=C(Cl)CO_2$	H	CH_3
1372	Cl	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1373	Cl	Cl	CO_2	H	CH_3
1374	H	Cl	O	H	CH_3
1375	H	Cl	OCH_2CO_2	H	CH_3
1376	H	Cl	$OCH(CH_3)CO_2$	H	CH_3
1377	H	Cl	SCH_2CO_2	H	CH_3
1378	H	Cl	$CH=C(Cl)CO_2$	H	NH_2
1379	H	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1380	H	Cl	CO_2	H	NH_2

1381	H	Cl	OCH_2CO_2	H	NH_2
1382	H	Cl	SCH_2CO_2	H	NH_2

Table 19

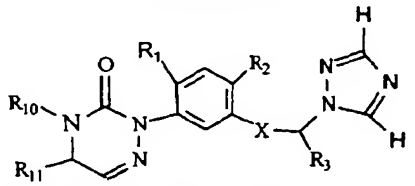


where A=B=N, R_4=R_5=H, Q=Q13 in a compound of formula I

No	R_1	R_2	X	R_3	R_{10}
1383	F	Cl	CO_2	H	CH_3
1384	F	Cl	CO_2	CH_3	CH_3
1385	F	Cl	CO_2	C_2H_5	CH_3
1386	F	Cl	CO_2	H	NH_2
1387	F	Cl	CO_2	CH_3	NH_2
1388	F	Cl	CO_2	C_2H_5	NH_2
1389	F	Cl	CO_2	CN	NH_2
1390	F	Cl	CO_2	CN	CH_3
1391	F	Cl	OCH_2CO_2	H	CH_3
1392	F	Cl	OCH_2CO_2	CH_3	CH_3
1393	F	Cl	OCH_2CO_2	C_2H_5	CH_3
1394	F	Cl	OCH_2CO_2	H	NH_2
1395	F	Cl	OCH_2CO_2	CH_3	NH_2
1396	F	Cl	OCH_2CO_2	C_2H_5	NH_2
1397	F	Cl	OCH_2CO_2	CN	NH_2
1398	F	Cl	OCH_2CO_2	CN	CH_3
1399	F	Cl	$OCH(CH_3)CO_2$	H	CH_3
1400	F	Cl	$OCH(CH_3)CO_2$	CH_3	CH_3
1401	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	CH_3
1402	F	Cl	$OCH(CH_3)CO_2$	H	NH_2
1403	F	Cl	$OCH(CH_3)CO_2$	CH_3	NH_2
1404	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	NH_2
1405	F	Cl	$OCH(CH_3)CO_2$	CN	NH_2
1406	F	Cl	$OCH(CH_3)CO_2$	CN	CH_3
1407	F	Cl	O	H	CH_3
1408	F	Cl	O	CH_3	CH_3
1409	F	Cl	O	C_2H_5	CH_3
1410	F	Cl	O	H	NH_2
1411	F	Cl	O	CH_3	NH_2
1412	F	Cl	O	C_2H_5	NH_2
1413	F	Cl	O	CN	NH_2
1414	F	Cl	O	CN	CH_3
1415	F	Cl	SCH_2CO_2	H	CH_3
1416	F	Cl	SCH_2CO_2	CH_3	CH_3

1417	F	Cl	SCH_2CO_2	C_2H_5	CH_3
1418	F	Cl	SCH_2CO_2	H	NH_2
1419	F	Cl	SCH_2CO_2	CH_3	NH_2
1420	F	Cl	SCH_2CO_2	C_2H_5	NH_2
1421	F	Cl	SCH_2CO_2	CN	NH_2
1422	F	Cl	SCH_2CO_2	CN	CH_3
1423	F	H	$SCH(CH_3)CO_2$	H	CH_3
1424	F	Cl	$SCH(CH_3)CO_2$	CH_3	CH_3
1425	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	CH_3
1426	F	Cl	$SCH(CH_3)CO_2$	H	NH_2
1427	F	Cl	$SCH(CH_3)CO_2$	CH_3	NH_2
1428	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	NH_2
1429	F	Cl	$CH=C(Cl)CO_2$	H	NH_2
1430	F	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1431	F	Cl	$CH=C(Cl)CO_2$	CN	NH_2
1432	F	Cl	$CH_2CH(Cl)CO_2$	CN	NH_2
1433	F	Cl	S	H	CH_3
1434	F	Cl	S	H	NH_2
1435	F	Cl	$CH=C(Cl)CO_2$	H	CH_3
1436	F	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1437	F	Cl	$CH=C(Cl)CO_2$	CN	CH_3
1438	F	Cl	$CH_2CH(Cl)CO_2$	CN	CH_3
1439	Cl	Cl	O	H	NH_2
1440	Cl	Cl	OCH_2CO_2	H	CH_3
1441	Cl	Cl	$OCH(CH_3)CO_2$	H	CH_3
1442	Cl	Cl	SCH_2CO_2	H	CH_3
1443	Cl	Cl	$CH=C(Cl)CO_2$	H	CH_3
1444	Cl	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1445	Cl	Cl	CO_2	H	CH_3
1446	H	Cl	O	H	CH_3
1447	H	Cl	OCH_2CO_2	H	CH_3
1448	H	Cl	$OCH(CH_3)CO_2$	H	CH_3
1449	H	Cl	SCH_2CO_2	H	CH_3
1450	H	Cl	$CH=C(Cl)CO_2$	H	NH_2
1451	H	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1452	H	Cl	CO_2	H	NH_2
1453	H	Cl	OCH_2CO_2	H	NH_2
1454	H	Cl	SCH_2CO_2	H	NH_2

Table 20

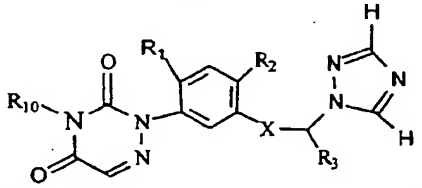


where A=B=N, R_4=R_5=H, R_{11}=CH_3, Q=Q14 in a compound of formula I

No	R_1	R_2	X	R_3	R_{10}
1455	F	Cl	CO_2	H	CH_3
1456	F	Cl	CO_2	CH_3	CH_3
1457	F	Cl	CO_2	C_2H_5	CH_3
1458	F	Cl	CO_2	H	NH_2
1459	F	Cl	CO_2	CH_3	NH_2
1460	F	Cl	CO_2	C_2H_5	NH_2
1461	F	Cl	CO_2	CN	NH_2
1462	F	Cl	CO_2	CN	CH_3
1463	F	Cl	OCH_2CO_2	H	CH_3
1464	F	Cl	OCH_2CO_2	CH_3	CH_3
1465	F	Cl	OCH_2CO_2	C_2H_5	CH_3
1466	F	Cl	OCH_2CO_2	H	NH_2
1467	F	Cl	OCH_2CO_2	CH_3	NH_2
1468	F	Cl	OCH_2CO_2	C_2H_5	NH_2
1469	F	Cl	OCH_2CO_2	CN	NH_2
1470	F	Cl	OCH_2CO_2	CN	CH_3
1471	F	Cl	$OCH(CH_3)CO_2$	H	CH_3
1472	F	Cl	$OCH(CH_3)CO_2$	CH_3	CH_3
1473	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	CH_3
1474	F	Cl	$OCH(CH_3)CO_2$	H	NH_2
1475	F	Cl	$OCH(CH_3)CO_2$	CH_3	NH_2
1476	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	NH_2
1477	F	Cl	$OCH(CH_3)CO_2$	CN	NH_2
1478	F	Cl	$OCH(CH_3)CO_2$	CN	CH_3
1479	F	Cl	O	H	CH_3
1480	F	Cl	O	CH_3	CH_3
1481	F	Cl	O	C_2H_5	CH_3
1482	F	Cl	O	H	NH_2
1483	F	Cl	O	CH_3	NH_2
1484	F	Cl	O	C_2H_5	NH_2
1485	F	Cl	O	CN	NH_2
1486	F	Cl	O	CN	CH_3
1487	F	Cl	SCH_2CO_2	H	CH_3
1488	F	Cl	SCH_2CO_2	CH_3	CH_3
1489	F	Cl	SCH_2CO_2	C_2H_5	CH_3
1490	F	Cl	SCH_2CO_2	H	NH_2
1491	F	Cl	SCH_2CO_2	CH_3	NH_2
1492	F	Cl	SCH_2CO_2	C_2H_5	NH_2
1493	F	Cl	SCH_2CO_2	CN	NH_2
1494	F	Cl	SCH_2CO_2	CN	CH_3
1495	F	H	$SCH(CH_3)CO_2$	H	CH_3
1496	F	Cl	$SCH(CH_3)CO_2$	CH_3	CH_3
1497	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	CH_3
1498	F	Cl	$SCH(CH_3)CO_2$	H	NH_2
1499	F	Cl	$SCH(CH_3)CO_2$	CH_3	NH_2
1500	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	NH_2
1501	F	Cl	$CH=C(Cl)CO_2$	H	NH_2

1502	F	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1503	F	Cl	$CH=C(Cl)CO_2$	CN	NH_2
1504	F	Cl	$CH_2CH(Cl)CO_2$	CN	NH_2
1505	F	Cl	S	H	CH_3
1506	F	Cl	S	H	NH_2
1507	F	Cl	$CH=C(Cl)CO_2$	H	CH_3
1508	F	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1509	F	Cl	$CH=C(Cl)CO_2$	CN	CH_3
1510	F	Cl	$CH_2CH(Cl)CO_2$	CN	CH_3
1511	Cl	Cl	O	H	NH_2
1512	Cl	Cl	OCH_2CO_2	H	CH_3
1513	Cl	Cl	$OCH(CH_3)CO_2$	H	CH_3
1514	Cl	Cl	SCH_2CO_2	H	CH_3
1515	Cl	Cl	$CH=C(Cl)CO_2$	H	CH_3
1516	Cl	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1517	Cl	Cl	CO_2	H	CH_3
1518	H	Cl	O	H	CH_3
1519	H	Cl	OCH_2CO_2	H	CH_3
1520	H	Cl	$OCH(CH_3)CO_2$	H	CH_3
1521	H	Cl	SCH_2CO_2	H	CH_3
1522	H	Cl	$CH=C(Cl)CO_2$	H	NH_2
1523	H	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1524	H	Cl	CO_2	H	NH_2
1525	H	Cl	OCH_2CO_2	H	NH_2
1526	H	Cl	SCH_2CO_2	H	NH_2

Table 21



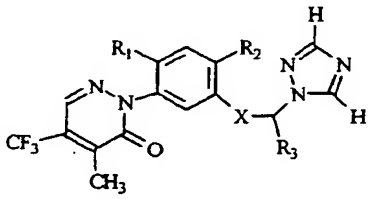
where A=B=N, R_4=R_5=H, Q=Q15 in a compound of formula I

No	R_1	R_2	X	R_3	R_{10}
1527	F	Cl	CO_2	H	CH_3
1528	F	Cl	CO_2	CH_3	CH_3
1529	F	Cl	CO_2	C_2H_5	CH_3
1530	F	Cl	CO_2	H	NH_2
1531	F	Cl	CO_2	CH_3	NH_2
1532	F	Cl	CO_2	C_2H_5	NH_2
1533	F	Cl	CO_2	CN	NH_2
1534	F	Cl	CO_2	CN	CH_3
1535	F	Cl	OCH_2CO_2	H	CH_3
1536	F	Cl	OCH_2CO_2	CH_3	CH_3
1537	F	Cl	OCH_2CO_2	C_2H_5	CH_3

1538	F	Cl	OCH_2CO_2	H	NH_2
1539	F	Cl	OCH_2CO_2	CH_3	NH_2
1540	F	Cl	OCH_2CO_2	C_2H_5	NH_2
1541	F	Cl	OCH_2CO_2	CN	NH_2
1542	F	Cl	OCH_2CO_2	CN	CH_3
1543	F	Cl	$OCH(CH_3)CO_2$	H	CH_3
1544	F	Cl	$OCH(CH_3)CO_2$	CH_3	CH_3
1545	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	CH_3
1546	F	Cl	$OCH(CH_3)CO_2$	H	NH_2
1547	F	Cl	$OCH(CH_3)CO_2$	CH_3	NH_2
1548	F	Cl	$OCH(CH_3)CO_2$	C_2H_5	NH_2
1549	F	Cl	$OCH(CH_3)CO_2$	CN	NH_2
1550	F	Cl	$OCH(CH_3)CO_2$	CN	CH_3
1551	F	Cl	O	H	CH_3
1552	F	Cl	O	CH_3	CH_3
1553	F	Cl	O	C_2H_5	CH_3
1554	F	Cl	O	H	NH_2
1555	F	Cl	O	CH_3	NH_2
1556	F	Cl	O	C_2H_5	NH_2
1557	F	Cl	O	CN	NH_2
1558	F	Cl	O	CN	CH_3
1559	F	Cl	SCH_2CO_2	H	CH_3
1560	F	Cl	SCH_2CO_2	CH_3	CH_3
1561	F	Cl	SCH_2CO_2	C_2H_5	CH_3
1562	F	Cl	SCH_2CO_2	H	NH_2
1563	F	Cl	SCH_2CO_2	CH_3	NH_2
1564	F	Cl	SCH_2CO_2	C_2H_5	NH_2
1565	F	Cl	SCH_2CO_2	CN	NH_2
1566	F	Cl	SCH_2CO_2	CN	CH_3
1567	F	H	$SCH(CH_3)CO_2$	H	CH_3
1568	F	Cl	$SCH(CH_3)CO_2$	CH_3	CH_3
1569	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	CH_3
1570	F	Cl	$SCH(CH_3)CO_2$	H	NH_2
1571	F	Cl	$SCH(CH_3)CO_2$	CH_3	NH_2
1572	F	Cl	$SCH(CH_3)CO_2$	C_2H_5	NH_2
1573	F	Cl	$CH=C(Cl)CO_2$	H	NH_2
1574	F	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1575	F	Cl	$CH=C(Cl)CO_2$	CN	NH_2
1576	F	Cl	$CH_2CH(Cl)CO_2$	CN	NH_2
1577	F	Cl	S	H	CH_3
1578	F	Cl	S	H	NH_2
1579	F	Cl	$CH=C(Cl)CO_2$	H	CH_3
1580	F	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1581	F	Cl	$CH=C(Cl)CO_2$	CN	CH_3
1582	F	Cl	$CH_2CH(Cl)CO_2$	CN	CH_3
1583	Cl	Cl	O	H	NH_2
1584	Cl	Cl	OCH_2CO_2	H	CH_3
1585	Cl	Cl	$OCH(CH_3)CO_2$	H	CH_3

1586	Cl	Cl	SCH_2CO_2	H	CH_3
1587	Cl	Cl	$CH=C(Cl)CO_2$	H	CH_3
1588	Cl	Cl	$CH_2CH(Cl)CO_2$	H	CH_3
1589	Cl	Cl	CO_2	H	CH_3
1590	H	Cl	O	H	CH_3
1591	H	Cl	OCH_2CO_2	H	CH_3
1592	H	Cl	$OCH(CH_3)CO_2$	H	CH_3
1593	H	Cl	SCH_2CO_2	H	CH_3
1594	H	Cl	$CH=C(Cl)CO_2$	H	NH_2
1595	H	Cl	$CH_2CH(Cl)CO_2$	H	NH_2
1596	H	Cl	CO_2	H	NH_2
1597	H	Cl	OCH_2CO_2	H	NH_2
1598	H	Cl	SCH_2CO_2	H	NH_2

Table 22



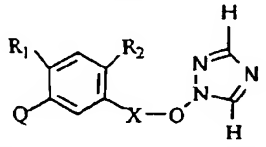
where A=B=N, R_4=R_5=H, Q=Q16 in a compound of formula I

No	R_1	R_2	X	R_3
1599	F	Cl	CO_2	H
1600	F	Cl	CO_2	CH_3
1601	F	Cl	CO_2	C_2H_5
1602	F	Cl	CO_2	Ph
1603	F	Cl	CO_2	CH_2Ph
1604	F	Cl	CO_2	Ph-4-Cl
1605	F	Cl	CO_2	CH_2Ph-4-Cl
1606	F	Cl	CO_2	3-Py
1607	F	Cl	OCH_2CO_2	H
1608	F	Cl	OCH_2CO_2	CH_3
1609	F	Cl	OCH_2CO_2	C_2H_5
1610	F	Cl	OCH_2CO_2	Ph
1611	F	Cl	OCH_2CO_2	CH_2Ph
1612	F	Cl	OCH_2CO_2	Ph-4-Cl
1613	F	Cl	OCH_2CO_2	CH_2Ph-4-Cl
1614	F	Cl	OCH_2CO_2	3-Py
1615	F	Cl	$OCH(CH_3)CO_2$	H
1616	F	Cl	$OCH(CH_3)CO_2$	CH_3
1617	F	Cl	$OCH(CH_3)CO_2$	C_2H_5
1618	F	Cl	$OCH(CH_3)CO_2$	Ph
1619	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph
1620	F	Cl	$OCH(CH_3)CO_2$	Ph-4-Cl
1621	F	Cl	$OCH(CH_3)CO_2$	CH_2Ph-4-Cl

1622	F	Cl	$OCH(CH_3)CO_2$	3-Py
1623	F	Cl	O	H
1624	F	Cl	O	CH_3
1625	F	Cl	O	C_2H_5
1626	F	Cl	O	Ph
1627	F	Cl	O	CH_2Ph
1628	F	Cl	O	Ph-4-Cl
1629	F	Cl	O	CH_2Ph-4-Cl
1630	F	Cl	O	3-Py
1631	F	Cl	SCH_2CO_2	H
1632	F	Cl	SCH_2CO_2	CH_3
1633	F	Cl	SCH_2CO_2	C_2H_5
1634	F	Cl	SCH_2CO_2	Ph
1635	F	Cl	SCH_2CO_2	CH_2Ph
1636	F	Cl	SCH_2CO_2	Ph-4-Cl
1637	F	Cl	SCH_2CO_2	CH_2Ph-4-Cl
1638	F	Cl	SCH_2CO_2	3-Py
1639	F	H	$SCH(CH_3)CO_2$	H
1640	F	Cl	$SCH(CH_3)CO_2$	CH_3
1641	F	Cl	$SCH(CH_3)CO_2$	C_2H_5
1642	F	Cl	$SCH(CH_3)CO_2$	Ph
1643	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph
1644	F	Cl	$SCH(CH_3)CO_2$	Ph-4-Cl
1645	F	Cl	$SCH(CH_3)CO_2$	CH_2Ph-4-Cl
1646	F	Cl	$SCH(CH_3)CO_2$	3-Py
1647	F	Cl	S	H
1648	F	Cl	S	CH_3
1649	F	Cl	S	C_2H_5
1650	F	Cl	S	Ph
1651	F	Cl	S	CH_2Ph
1652	F	Cl	S	Ph-4-Cl
1653	F	Cl	$CH=C(Cl)CO_2$	H
1654	F	Cl	$CH_2CH(Cl)CO_2$	H
1655	Cl	Cl	O	H
1656	Cl	Cl	OCH_2CO_2	H
1657	Cl	Cl	$CH=C(Cl)CO_2$	H
1658	Cl	Cl	$CH_2CH(Cl)CO_2$	H
1659	Cl	Cl	SCH_2CO_2	H
1660	Cl	Cl	$SCH(CH_3)CO_2$	H
1661	Cl	Cl	CO_2	H
1662	H	Cl	O	H
1663	H	Cl	OCH_2CO_2	H
1664	H	Cl	$OCH(CH_3)CO_2$	H
1665	H	Cl	SCH_2CO_2	H
1666	H	Cl	$CH=C(Cl)CO_2$	H
1667	H	Cl	$CH_2CH(Cl)CO_2$	H
1668	H	Cl	CO_2	H
1669	F	Cl	OCH_2CO_2	Ph-4-F

1670	F	Cl	SCH_2CO_2	Ph-4-F

Table 23



where A=R_4=R_5=H, A=B=N, R_{10}=CH_3, R_{11}=CH_3, Z=O in a compound of formula I

No	R_1	R_2	X	Q
1671	F	Cl	$OCH(CH_3)CO$	Q1
1672	F	Cl	$OCH(CH_3)CO$	Q2
1673	F	Cl	$OCH(CH_3)CO$	Q3
1674	F	Cl	$OCH(CH_3)CO$	Q4
1675	F	Cl	$OCH(CH_3)CO$	Q5
1676	F	Cl	$OCH(CH_3)CO$	Q6
1677	F	Cl	$OCH(CH_3)CO$	Q7
1678	F	Cl	$OCH(CH_3)CO$	Q8
1679	F	Cl	$OCH(CH_3)CO$	Q9
1680	F	Cl	$OCH(CH_3)CO$	Q10
1681	F	Cl	$OCH(CH_3)CO$	Q11
1682	F	Cl	$OCH(CH_3)CO$	Q12
1683	F	Cl	$OCH(CH_3)CO$	Q13
1684	F	Cl	$OCH(CH_3)CO$	Q14
1685	F	Cl	$OCH(CH_3)CO$	Q16
1686	F	Cl	OCH_2CO	Q1
1687	F	Cl	OCH_2CO	Q2
1688	F	Cl	OCH_2CO	Q3
1689	F	Cl	OCH_2CO	Q4
1690	F	Cl	OCH_2CO	Q5
1691	F	Cl	OCH_2CO	Q6
1692	F	Cl	OCH_2CO	Q7
1693	F	Cl	OCH_2CO	Q8
1694	F	Cl	OCH_2CO	Q9
1695	F	Cl	OCH_2CO	Q10
1696	F	Cl	OCH_2CO	Q11
1697	F	Cl	OCH_2CO	Q12
1698	F	Cl	OCH_2CO	Q13
1699	F	Cl	OCH_2CO	Q14
1700	F	Cl	OCH_2CO	Q16
1701	F	Cl	$CH_2CH(Cl)CO$	Q1
1702	F	Cl	$CH_2CH(Cl)CO$	Q2
1703	F	Cl	$CH_2CH(Cl)CO$	Q3
1704	F	Cl	$CH_2CH(Cl)CO$	Q4
1705	F	Cl	$CH_2CH(Cl)CO$	Q5
1706	F	Cl	$CH_2CH(Cl)CO$	Q6
1707	F	Cl	$CH_2CH(Cl)CO$	Q7

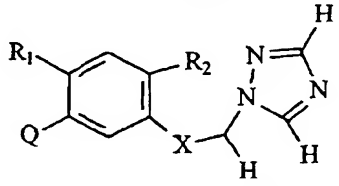
1708	F	Cl	$CH_2CH(Cl)CO$	Q8
1709	F	Cl	$CH_2CH(Cl)CO$	Q9
1710	F	Cl	$CH_2CH(Cl)CO$	Q10
1711	F	Cl	$CH_2CH(Cl)CO$	Q11
1712	F	Cl	$CH_2CH(Cl)CO$	Q12
1713	F	Cl	$CH_2CH(Cl)CO$	Q13
1714	F	Cl	$CH_2CH(Cl)CO$	Q14
1715	F	Cl	$CH_2CH(Cl)CO$	Q16
1716	F	Cl	$CH=C(Cl)CO$	Q1
1717	F	Cl	$CH=C(Cl)CO$	Q2
1718	F	Cl	$CH=C(Cl)CO$	Q3
1719	F	Cl	$CH=C(Cl)CO$	Q4
1720	F	Cl	$CH=C(Cl)CO$	Q5
1721	F	Cl	$CH=C(Cl)CO$	Q6
1722	F	Cl	$CH=C(Cl)CO$	Q7
1723	F	Cl	$CH=C(Cl)CO$	Q8
1724	F	Cl	$CH=C(Cl)CO$	Q9
1725	F	Cl	$CH=C(Cl)CO$	Q10
1726	F	Cl	$CH=C(Cl)CO$	Q11
1727	F	Cl	$CH=C(Cl)CO$	Q12
1728	F	Cl	$CH=C(Cl)CO$	Q13
1729	F	Cl	$CH=C(Cl)CO$	Q14
1730	F	Cl	$CH=C(Cl)CO$	Q16
1731	F	Cl	CO	Q1
1732	F	Cl	CO	Q2
1733	F	Cl	CO	Q3
1734	F	Cl	CO	Q4
1735	F	Cl	CO	Q5
1736	F	Cl	CO	Q6
1737	F	Cl	CO	Q7
1738	F	Cl	CO	Q8
1739	F	Cl	CO	Q9
1740	F	Cl	CO	Q10
1741	F	Cl	CO	Q11
1742	F	Cl	CO	Q12
1743	F	Cl	CO	Q13
1744	F	Cl	CO	Q14
1745	F	Cl	CO	Q16
1746	F	Cl	SCH_2CO	Q1
1747	F	Cl	SCH_2CO	Q2
1748	F	Cl	SCH_2CO	Q3
1749	F	Cl	SCH_2CO	Q4
1750	F	Cl	SCH_2CO	Q5
1751	F	Cl	SCH_2CO	Q6
1752	F	Cl	SCH_2CO	Q7
1753	F	Cl	SCH_2CO	Q8
1754	F	Cl	SCH_2CO	Q9
1755	F	Cl	SCH_2CO	Q10

1756	F	Cl	SCH_2CO	Q11
1757	F	Cl	SCH_2CO	Q12
1758	F	Cl	SCH_2CO	Q13
1759	F	Cl	SCH_2CO	Q14
1760	F	Cl	SCH_2CO	Q16
1761	Cl	Cl	CH=C(Cl)CO	Q1
1762	Cl	Cl	CH=C(Cl)CO	Q3
1763	Cl	Cl	CH=C(Cl)CO	Q6
1764	Cl	Cl	CH=C(Cl)CO	Q7
1765	Cl	Cl	CH=C(Cl)CO	Q8
1766	Cl	Cl	CH=C(Cl)CO	Q10
1767	Cl	Cl	CH=C(Cl)CO	Q11
1768	Cl	Cl	CH=C(Cl)CO	Q12
1769	Cl	Cl	CH=C(Cl)CO	Q16
1770	Cl	Cl	$CH_2CH(Cl)CO$	Q1
1771	Cl	Cl	$CH_2CH(Cl)CO$	Q3
1772	Cl	Cl	$CH_2CH(Cl)CO$	Q6
1773	Cl	Cl	$CH_2CH(Cl)CO$	Q7
1774	Cl	Cl	$CH_2CH(Cl)CO$	Q8
1775	Cl	Cl	$CH_2CH(Cl)CO$	Q10
1776	Cl	Cl	$CH_2CH(Cl)CO$	Q11
1777	Cl	Cl	$CH_2CH(Cl)CO$	Q12
1778	Cl	Cl	$CH_2CH(Cl)CO$	Q16
1779	Cl	Cl	OCH_2CO	Q1
1780	Cl	Cl	OCH_2CO	Q3
1781	Cl	Cl	OCH_2CO	Q6
1782	Cl	Cl	OCH_2CO	Q7
1783	Cl	Cl	OCH_2CO	Q8
1784	Cl	Cl	OCH_2CO	Q10
1785	Cl	Cl	OCH_2CO	Q11
1786	Cl	Cl	OCH_2CO	Q12
1787	Cl	Cl	OCH_2CO	Q16
1788	Cl	Cl	SCH_2CO	Q1
1789	Cl	Cl	SCH_2CO	Q3
1790	Cl	Cl	SCH_2CO	Q6
1791	Cl	Cl	SCH_2CO	Q7
1792	Cl	Cl	SCH_2CO	Q8
1793	Cl	Cl	SCH_2CO	Q10
1794	Cl	Cl	SCH_2CO	Q11
1795	Cl	Cl	SCH_2CO	Q12
1796	Cl	Cl	SCH_2CO	Q16
1797	Cl	Cl	CO	Q1
1798	Cl	Cl	CO	Q3
1799	Cl	Cl	CO	Q6
1800	Cl	Cl	CO	Q7
1801	Cl	Cl	CO	Q8
1802	Cl	Cl	CO	Q10
1803	Cl	Cl	CO	Q11

1804	Cl	Cl	CO	Q12
1805	Cl	Cl	CO	Q16
1806	Cl	Cl	$OCH(CH_3)CO$	Q1
1807	Cl	Cl	$OCH(CH_3)CO$	Q3
1808	Cl	Cl	$OCH(CH_3)CO$	Q6
1809	Cl	Cl	$OCH(CH_3)CO$	Q7
1810	Cl	Cl	$OCH(CH_3)CO$	Q8
1811	Cl	Cl	$OCH(CH_3)CO$	Q10
1812	Cl	Cl	$OCH(CH_3)CO$	Q11
1813	Cl	Cl	$OCH(CH_3)CO$	Q12
1814	Cl	Cl	$OCH(CH_3)CO$	Q16
1815	H	Cl	CH=C(Cl)CO	Q1
1816	H	Cl	CH=C(Cl)CO	Q3
1817	H	Cl	CH=C(Cl)CO	Q6
1818	H	Cl	CH=C(Cl)CO	Q7
1819	H	Cl	CH=C(Cl)CO	Q8
1820	H	Cl	CH=C(Cl)CO	Q10
1821	H	Cl	CH=C(Cl)CO	Q11
1822	H	Cl	CH=C(Cl)CO	Q12
1823	H	Cl	CH=C(Cl)CO	Q16
1824	H	Cl	$CH_2CH(Cl)CO$	Q1
1825	H	Cl	$CH_2CH(Cl)CO$	Q3
1826	H	Cl	$CH_2CH(Cl)CO$	Q6
1827	H	Cl	$CH_2CH(Cl)CO$	Q7
1828	H	Cl	$CH_2CH(Cl)CO$	Q8
1829	H	Cl	$CH_2CH(Cl)CO$	Q10
1830	H	Cl	$CH_2CH(Cl)CO$	Q11
1831	H	Cl	$CH_2CH(Cl)CO$	Q12
1832	H	Cl	$CH_2CH(Cl)CO$	Q16
1833	H	Cl	OCH_2CO	Q1
1834	H	Cl	OCH_2CO	Q3
1835	H	Cl	OCH_2CO	Q6
1836	H	Cl	OCH_2CO	Q7
1837	H	Cl	OCH_2CO	Q8
1838	H	Cl	OCH_2CO	Q10
1839	H	Cl	OCH_2CO	Q11
1840	H	Cl	OCH_2CO	Q12
1841	H	Cl	OCH_2CO	Q16
1842	H	Cl	SCH_2CO	Q1
1843	H	Cl	SCH_2CO	Q3
1844	H	Cl	SCH_2CO	Q6
1845	H	Cl	SCH_2CO	Q7
1846	H	Cl	SCH_2CO	Q8
1847	H	Cl	SCH_2CO	Q10
1848	H	Cl	SCH_2CO	Q11
1849	H	Cl	SCH_2CO	Q12
1850	H	Cl	SCH_2CO	Q16
1851	H	Cl	CO	Q1

1852	H	Cl	CO	Q3
1853	H	Cl	CO	Q6
1854	H	Cl	CO	Q7
1855	H	Cl	CO	Q8
1856	H	Cl	CO	Q10
1857	H	Cl	CO	Q11
1858	H	Cl	CO	Q12
1859	H	Cl	CO	Q16
1860	H	Cl	$OCH(CH_3)CO$	Q1
1861	H	Cl	$OCH(CH_3)CO$	Q3
1862	H	Cl	$OCH(CH_3)CO$	Q6
1863	H	Cl	$OCH(CH_3)CO$	Q7
1864	H	Cl	$OCH(CH_3)CO$	Q8
1865	H	Cl	$OCH(CH_3)CO$	Q10
1866	H	Cl	$OCH(CH_3)CO$	Q11
1867	H	Cl	$OCH(CH_3)CO$	Q12
1868	H	Cl	$OCH(CH_3)CO$	Q16

Table 24



SALT

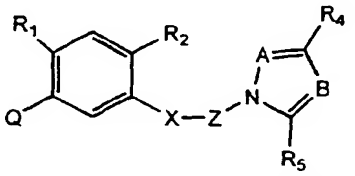
where R_3=R_4=R_5=H, A=B=N, R_{10}=CH_3 in a compound of formula I

No	R_1	R_2	X	Q	Salt
1869	F	Cl	O	Q1	HCl
1870	F	Cl	OCH_2CO_2	Q1	HCl
1871	F	Cl	SCH_2CO_2	Q1	HCl
1872	F	Cl	CO_2	Q1	HCl
1873	F	Cl	$CH_2CH(Cl)CO_2$	Q1	HCl
1874	F	Cl	$CH=C(Cl)CO_2$	Q1	HCl
1875	F	Cl	OCH_2CO_2	Q1	H_3PO_4
1876	F	Cl	OCH_2CO_2	Q1	CH_3CO_2H
1877	F	Cl	OCH_2CO_2	Q1	HCO_2CO_2H
1878	F	Cl	SCH_2CO_2	Q1	HCO_2CO_2H
1879	F	Cl	CO_2	Q1	HCO_2CO_2H
1880	F	Cl	$CH_2CH(Cl)CO_2$	Q1	HCO_2CO_2H
1881	F	Cl	$CH=C(Cl)CO_2$	Q1	HCO_2CO_2H
1882	Cl	Cl	O	Q1	HCl
1883	Cl	Cl	OCH_2CO_2	Q1	HCl
1884	Cl	Cl	SCH_2CO_2	Q1	HCl
1885	Cl	Cl	CO_2	Q1	HCl
1886	Cl	Cl	$CH_2CH(Cl)CO_2$	Q1	HCl
1887	Cl	Cl	$CH=C(Cl)CO_2$	Q1	HCl

1888	Cl	Cl	O	Q1	HCO_2CO_2H
1889	Cl	Cl	OCH_2CO_2	Q1	HCO_2CO_2H
1890	Cl	Cl	SCH_2CO_2	Q1	HCO_2CO_2H
1891	Cl	Cl	CO_2	Q1	HCO_2CO_2H
1892	Cl	Cl	$CH_2CH(Cl)CO_2$	Q1	HCO_2CO_2H
1893	Cl	Cl	$CH=C(Cl)CO_2$	Q1	HCO_2CO_2H
1894	H	Cl	O	Q1	HCl
1895	H	Cl	OCH_2CO_2	Q1	HCl
1896	H	Cl	SCH_2CO_2	Q1	HCl
1897	H	Cl	CO_2	Q1	HCl
1898	H	Cl	$CH_2CH(Cl)CO_2$	Q1	HCl
1899	H	Cl	$CH=C(Cl)CO_2$	Q1	HCl
1900	H	Cl	O	Q1	HCO_2CO_2H
1901	H	Cl	OCH_2CO_2	Q1	HCO_2CO_2H
1902	H	Cl	SCH_2CO_2	Q1	HCO_2CO_2H
1903	H	Cl	CO_2	Q1	HCO_2CO_2H
1904	H	Cl	$CH_2CH(Cl)CO_2$	Q1	HCO_2CO_2H
1905	H	Cl	$CH=C(Cl)CO_2$	Q1	HCO_2CO_2H
1906	F	Cl	O	Q3	HCl
1907	F	Cl	OCH_2CO_2	Q3	HCl
1908	F	Cl	SCH_2CO_2	Q3	HCl
1909	F	Cl	CO_2	Q3	HCl
1910	F	Cl	$CH_2CH(Cl)CO_2$	Q3	HCl
1911	F	Cl	$CH=C(Cl)CO_2$	Q3	HCl
1912	F	Cl	O	Q7	HCl
1913	F	Cl	OCH_2CO_2	Q7	HCl
1914	F	Cl	SCH_2CO_2	Q7	HCl
1915	F	Cl	CO_2	Q7	HCl
1916	F	Cl	$CH_2CH(Cl)CO_2$	Q7	HCl
1917	F	Cl	$CH=C(Cl)CO_2$	Q7	HCl
1918	F	Cl	O	Q8	HCl
1919	F	Cl	OCH_2CO_2	Q8	HCl
1920	F	Cl	SCH_2CO_2	Q8	HCl
1921	F	Cl	CO_2	Q8	HCl
1922	F	Cl	$CH_2CH(Cl)CO_2$	Q8	HCl
1923	F	Cl	$CH=C(Cl)CO_2$	Q8	HCl
1924	F	Cl	O	Q10	HCl
1925	F	Cl	OCH_2CO_2	Q10	HCl
1926	F	Cl	SCH_2CO_2	Q10	HCl
1927	F	Cl	CO_2	Q10	HCl
1928	F	Cl	$CH_2CH(Cl)CO_2$	Q10	HCl
1929	F	Cl	$CH=C(Cl)CO_2$	Q10	HCl
1930	F	Cl	O	Q11	HCl
1931	F	Cl	OCH_2CO_2	Q11	HCl
1932	F	Cl	SCH_2CO_2	Q11	HCl
1933	F	Cl	CO_2	Q11	HCl
1934	F	Cl	$CH_2CH(Cl)CO_2$	Q11	HCl
1935	F	Cl	$CH=C(Cl)CO_2$	Q11	HCl

1936	Cl	Cl	O	Q12	HCl
1937	Cl	Cl	OCH_2CO_2	Q12	HCl
1938	Cl	Cl	SCH_2CO_2	Q12	HCl
1939	Cl	Cl	CO_2	Q12	HCl
1940	Cl	Cl	$CH_2CH(Cl)CO_2$	Q12	HCl
1941	Cl	Cl	$CH=C(Cl)CO_2$	Q12	HCl

Table 25



where R_{10}=CH_3 when Q is Q12 in a compound of formula I

No	R_1	R_2	X	Z	R_4	R_5	Q	A	B
1942	F	Cl	NH	CO	H	H	Q1	N	N
1943	F	Cl	NH	CO	CH_3	CH_3	Q1	N	N
1944	F	Cl	NH	CO	H	SCH_3	Q1	N	N
1945	F	Cl	NH	CO	H	CO_2CH_3	Q1	N	N
1946	F	Cl	NH	CO	Ph-4-Cl	H	Q1	N	N
1947	F	Cl	NH	CO	CH_3	CO_2CH_3	Q1	N	N
1948	F	Cl	NH	CO	H	H	Q1	N	CH
1949	F	Cl	NH	CO	CH_3	CH_3	Q1	N	CCO_2CH_3
1950	F	Cl	NH	CO	Cl	Cl	Q1	N	$CCONMe_2$
1951	F	Cl	NH	CO	C_2H_5	CO_2CH_3	Q1	N	CH
1952	F	Cl	NH	CO	CH_3	CONHPh	Q1	N	CH
1953	F	Cl	NH	CO	Ph-4-Cl	CO_2NMe_2	Q1	N	CCl
1954	F	Cl	NH	CO	H	H	Q1	CH	N
1955	F	Cl	NSO_2CH_3	CO	H	H	Q1	N	N
1956	F	Cl	NSO_2CH_3	CO	H	H	Q1	N	CH
1957	F	CN	NSO_2CH_3	CO	H	H	Q1	CH	N
1958	F	Cl	NSO_2CF_3	CO	H	H	Q1	N	N
1959	F	CN	NSO_2CF_3	CO	H	H	Q1	N	CH
1960	F	Cl	NSO_2CF_3	CO	H	H	Q1	CH	N
1961	F	Cl	NSO_2CH_3	CH_2	H	H	Q1	N	N
1962	F	Cl	NSO_2CH_3	CH_2	H	H	Q1	N	CH
1963	F	Cl	NSO_2CH_3	CH_2	H	H	Q1	CH	N
1964	F	Cl	NSO_2CF_3	CH_2	H	H	Q1	N	N
1965	F	Cl	NSO_2CF_3	CH_2	H	H	Q1	N	CH
1966	F	Cl	NSO_2CF_3	CH_2	H	H	Q1	CH	N
1967	F	Cl	NSO_2CH_3	CO	H	H	Q2	N	N
1968	F	CN	NSO_2CH_3	CO	H	H	Q2	N	CH
1969	F	Cl	NSO_2CH_3	CO	H	H	Q2	CH	N
1970	F	Cl	NSO_2CF_3	CO	H	H	Q2	N	N
1971	F	Cl	NSO_2CF_3	CO	H	H	Q2	N	CH

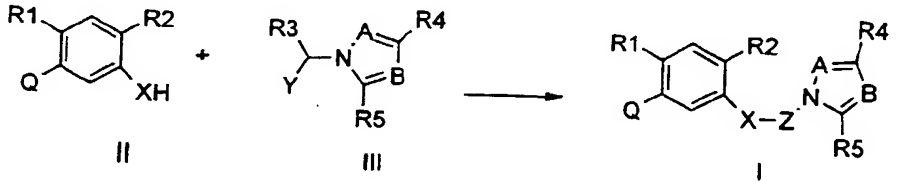
1972	F	CN	NSO_2CF_3	CO	H	H	Q2	CH	N
1973	F	Cl	NSO_2CH_3	CH_2	H	H	Q2	N	N
1974	F	Cl	NSO_2CH_3	CH_2	H	H	Q2	N	CH
1975	F	Cl	NSO_2CH_3	CH_2	H	H	Q2	CH	N
1976	F	Cl	NSO_2CF_3	CH_2	H	H	Q2	N	N
1977	F	CN	NSO_2CF_3	CH_2	H	H	Q2	N	CH
1978	F	Cl	NSO_2CF_3	CH_2	H	H	Q2	CH	N
1979	F	CN	NSO_2CH_3	CO	H	H	Q3	N	CH
1980	F	Cl	NSO_2CH_3	CO	H	H	Q3	CH	N
1981	F	Cl	NSO_2CF_3	CO	H	H	Q3	N	N
1982	F	Cl	NSO_2CH_3	CH_2	H	H	Q3	N	N
1983	F	Cl	NSO_2CH_3	CH_2	H	H	Q3	N	CH
1984	F	Cl	NSO_2CH_3	CH_2	H	H	Q3	CH	N
1985	F	Cl	NSO_2CH_3	CO	H	H	Q7	N	CH
1986	F	Cl	NSO_2CH_3	CO	H	H	Q7	CH	N
1987	F	Cl	NSO_2CH_3	CO	H	H	Q7	N	N
1988	F	Cl	NSO_2CH_3	CH_2	H	H	Q7	N	N
1989	F	Cl	NSO_2CH_3	CH_2	H	H	Q7	N	CH
1990	F	Cl	NSO_2CH_3	CH_2	H	H	Q7	CH	N
1991	F	Cl	NSO_2CH_3	CO	H	H	Q8	N	N
1992	F	Cl	NSO_2CH_3	CO	H	H	Q8	CH	N
1993	F	Cl	NSO_2CH_3	CO	H	H	Q8	N	CH
1994	F	Cl	NSO_2CF_3	CO	H	H	Q8	N	N
1995	F	Cl	NSO_2CF_3	CO	H	H	Q8	CH	N
1996	F	Cl	NSO_2CF_3	CO	H	H	Q8	N	CH
1997	F	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	N	N
1998	F	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	CH	N
1999	F	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	N	CH
2000	Cl	Cl	NSO_2CH_3	CO	H	H	Q8	N	N
2001	Cl	Cl	NSO_2CH_3	CO	H	H	Q8	CH	N
2002	Cl	Cl	NSO_2CH_3	CO	H	H	Q8	N	CH
2003	Cl	Cl	NSO_2CF_3	CO	H	H	Q8	N	N
2004	Cl	Cl	NSO_2CF_3	CO	H	H	Q8	CH	N
2005	Cl	Cl	NSO_2CF_3	CO	H	H	Q8	N	CH
2006	Cl	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	N	N
2007	Cl	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	CH	N
2008	Cl	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	N	CH
2009	F	Cl	$CH_2C(Cl)$	CO	H	H	Q8	N	N
2010	F	Cl	$CH_2C(Cl)$	CO	H	H	Q8	CH	N
2011	F	Cl	$CH_2C(Cl)$	CO	H	H	Q8	N	CH
2012	F	Cl	$CH_2C(Cl)$	CO	H	H	Q1	N	N
2013	F	Cl	$CH_2C(Cl)$	CO	H	H	Q1	CH	N
2014	F	Cl	$CH_2C(Cl)$	CO	H	H	Q1	N	CH
2015	H	Cl	CH=C(Cl)	CO	H	H	Q1	N	N
2016	F	Cl	OCH_2	CO	H	H	Q1	N	N
2017	F	Cl	SCH_2	CO	H	H	Q3	N	N
2018	F	Cl	$CH_2C(Cl)$	CO	H	H	Q10	N	CH
2019	H	Cl	CH=C(Cl)	CO	H	H	Q10	N	N

2020	F	Cl	OCH_2	CO	H	H	Q10	N	N
2021	F	Cl	SCH_2	CO	H	H	Q10	N	N
2022	F	Cl	$CH_2C(Cl)$	CO	H	H	Q11	N	CH
2023	H	Cl	$CH=C(Cl)$	CO	H	H	Q11	N	N
2024	F	Cl	OCH_2	CO	H	H	Q11	N	N
2025	F	Cl	SCH_2	CO	H	H	Q11	N	N
2026	F	Cl	$CH_2C(Cl)$	CO	H	H	Q12	N	CH
2027	H	Cl	$CH=C(Cl)$	CO	H	H	Q12	N	N
2028	F	Cl	OCH_2	CO	H	H	Q12	N	N
2029	F	Cl	SCH_2	CO	H	H	Q12	N	N
2030	F	Cl	$CH_2C(Cl)$	CO	H	H	Q16	N	CH
2031	H	Cl	$CH=C(Cl)$	CO	H	H	Q16	N	N
2032	F	Cl	OCH_2	CO	H	H	Q16	N	N
2033	F	Cl	SCH_2	CO	H	H	Q16	N	N
2034	F	Cl	NSO_2CH_3	CO	H	H	Q7	N	N
2035	F	Cl	NSO_2CH_3	CO	H	H	Q10	N	N
2036	F	Cl	NSO_2CH_3	CO	H	H	Q11	N	N
2037	F	Cl	NSO_2CH_3	CO	H	H	Q12	N	N
2038	F	Cl	NSO_2CH_3	CO	H	H	Q16	N	N
2039	F	Cl	NSO_2CH_3	CH_2	H	H	Q7	N	N
2040	F	Cl	NSO_2CH_3	CH_2	H	H	Q10	N	N
2041	F	Cl	NSO_2CH_3	CH_2	H	H	Q11	N	N
2042	F	Cl	NSO_2CH_3	CH_2	H	H	Q12	N	N
2043	F	Cl	NSO_2CH_3	CH_2	H	H	Q16	N	N
2044	Cl	Cl	NSO_2CH_3	CO	H	H	Q7	N	N
2045	Cl	Cl	NSO_2CH_3	CO	H	H	Q10	N	N
2046	Cl	Cl	NSO_2CH_3	CO	H	H	Q11	N	N
2047	Cl	Cl	NSO_2CH_3	CO	H	H	Q12	N	N
2048	Cl	Cl	NSO_2CH_3	CO	H	H	Q16	N	N
2049	Cl	Cl	NSO_2CH_3	CH_2	H	H	Q7	N	N
2050	Cl	Cl	NSO_2CH_3	CH_2	H	H	Q10	N	N
2051	Cl	Cl	NSO_2CH_3	CH_2	H	H	Q11	N	N
2052	Cl	Cl	NSO_2CH_3	CH_2	H	H	Q12	N	N
2053	Cl	Cl	NSO_2CH_3	CH_2	H	H	Q16	N	N
2054	H	Cl	NSO_2CH_3	CO	H	H	Q7	N	N
2055	H	Cl	NSO_2CH_3	CO	H	H	Q10	N	N
2056	H	Cl	NSO_2CH_3	CO	H	H	Q11	N	N
2057	H	Cl	NSO_2CH_3	CO	H	H	Q12	N	N
2058	H	Cl	NSO_2CH_3	CO	H	H	Q16	N	N
2059	H	Cl	NSO_2CH_3	CH_2	H	H	Q7	N	N
2060	H	Cl	NSO_2CH_3	CH_2	H	H	Q10	N	N
2061	H	Cl	NSO_2CH_3	CH_2	H	H	Q11	N	N
2062	H	Cl	NSO_2CH_3	CH_2	H	H	Q12	N	N
2063	H	Cl	NSO_2CH_3	CH_2	H	H	Q16	N	N
2064	H	Cl	NSO_2CH_3	CO	H	H	Q8	N	N
2065	H	Cl	NSO_2CH_3	CO	H	H	Q8	CH	N
2066	H	Cl	NSO_2CH_3	CO	H	H	Q8	N	CH
2067	H	Cl	NSO_2CF_3	CO	H	H	Q8	N	N

2068	H	Cl	NSO_2CF_3	CO	H	H	Q8	CH	N
2069	H	Cl	NSO_2CF_3	CO	H	H	Q8	N	CH
2070	H	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	N	N
2071	H	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	CH	N
2072	H	Cl	NSO_2Et	CO	CH_3	CH_3	Q8	N	CH

[0035] The compounds of formula I of the present invention can be prepared by the following processes:

Scheme 1



II III I

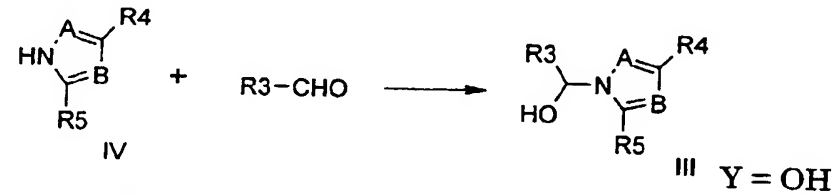
Ester and amide linkages

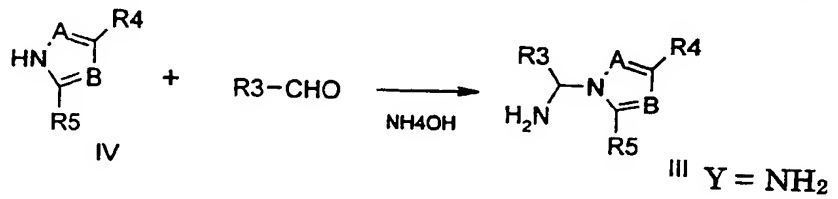
[0036] For structure II and III, where X is for example CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH_2CH(Cl)CO_2$, $CH=C(Cl)CO_2$ and Y is for example OH, NH_2:

[0037] Compounds II or their sodium, potassium salts are reacted with the one of the following regents: $SOCl_2$, $(COCl)_2$, $COCl_2$, PCl_3 or $POCl_3$ in a solvent such as chloroform ,dichloromethane, carbon tetrachloride, hexane, benzene, toluene, tetrahydrofuran, dioxane, acetone or methyl ethyl ketone to yield an acid chloride. This acid chloride then reacted with intermediate III, (optionally in the presence of the bases such as Et_3N, pyridine, NaOH, KOH, Na_2CO_3, K_2CO_3, $NaHCO_3$) at a temperature from -40 °C to the boiling point of the solvent for 3 minutes to 8 hours to afford the final product I.

[0038] Intermediate II may be obtained from the ester (made by known methods such as those described in EP 0 083 055 A2) by reacting with K_2CO_3, NaOH, or KOH in ethanol, then with an inorganic acid such as hydrochloric acid.

[0039] Intermediate III (where R_3 is alkyl) may be obtained from the known reactions of an aldehyde with IV in the presence or absence of ammonium hydroxide.



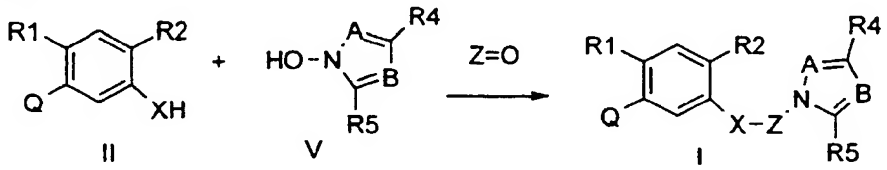


Ether, thioether, amine linkages

[0040] For structure II (where X is O S, NH) and structure III (where Y=Cl, OSO_2CH_3, etc.), compounds II are

reacted with the intermediates **III** in the presence of bases such as Et_3N, pyridine, NaOH, KOH, Na_2CO_3, K_2CO_3, $NaHCO_3$, NaH, $NaOCH_3$, $NaOC_2H_5$, in a solvent such as tetrahydrofuran, dioxane, acetone, methyl ethyl ketone, acetonitrile , N,N-dimethylformamide at a temperature from -40°C to the boiling point of the solvent for 30 minutes to 18 hours to afford the final product **I**.

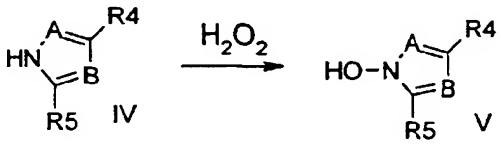
Scheme 2



[0041] For structure **II** where X is for example CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH_2CH(Cl)CO_2$ or $CH=C(Cl)CO_2$:

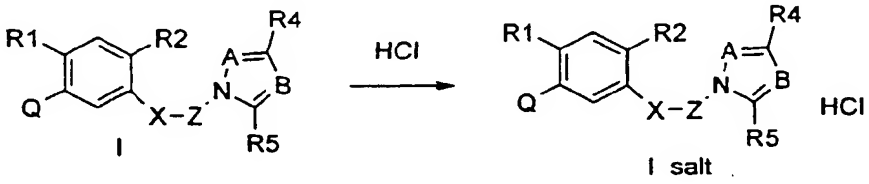
[0042] Compounds **II** or their sodium, potassium salts are reacted with the one of the following regents: $SOCl_2$, $(COCl)_2$, $COCl_2$, PCl_3 or $POCl_3$ in a solvent such as chloroform, dichloromethane, carbon tetrachloride, hexane, benzene, toluene, tetrahydrofuran, dioxane, acetone or methyl ethyl ketone to yield an acid chloride. This acid chloride then reacted with intermediate **V**, (optionally in the presence of the bases such as Et_3N, pyridine, NaOH, KOH, Na_2CO_3, K_2CO_3 or $NaHCO_3$) at a temperature from -40 °C to the boiling point of the solvent for 3 minutes to 8 hours to afford the final product **I**.

[0043] Intermediates **V** were prepared by known methods, for example see EP 0 567 827 A1.



Scheme 3

[0044] The preparation of the salts of formula **I**, for example, is straightforward as shown:

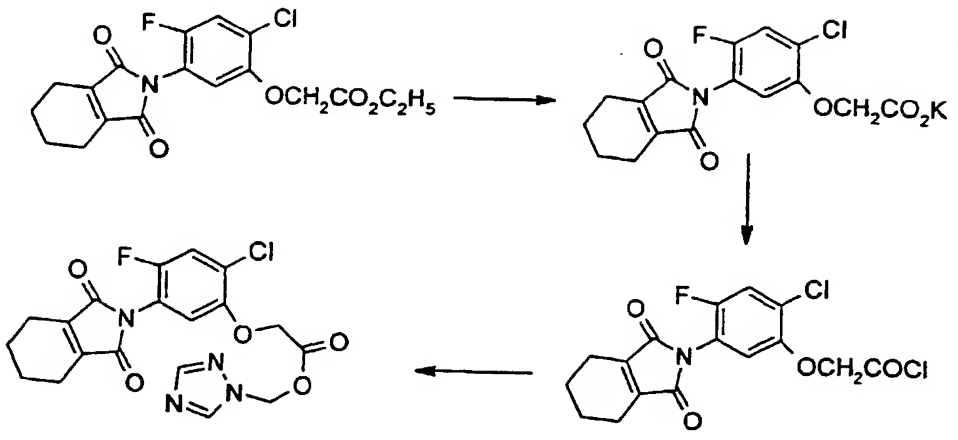


[0045] The salts of formula **I** can be prepared from **I** in ethanol or other solvent with HCl, CH_3CO_2H, H_3PO_4, HO_2CCO_2H etc. or other acids.

[0046] The present invention now will be described in further detail with reference to Examples in order to further guide its practitioner. However, it should be understood that the present invention is by no means restricted by these specific Examples.

PREPARATION EXAMPLE A (Compound No. 15)

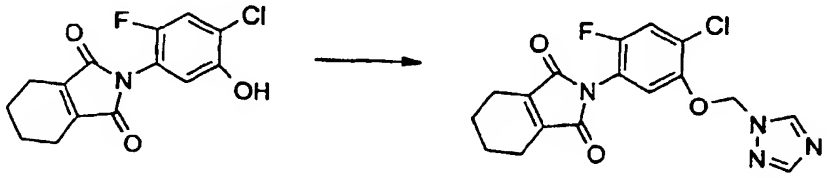
[0047]



[0048] 2-(4-Chloro-2-fluoro-5-ethoxycarbonylmethoxyphenyl)-4,5,6,7-tetrahydro-2H-isoindole-1,3-dione (4.0g, made substantially by the methods described in EP 0 083 055 A2) and KOH (85%, 2.1g) in 50ml ethanol were stirred at room temperature for 1 hour and then evaporated to dryness. To the residue was added 100ml chloroform and 8ml $SOCl_2$. The reaction mixture was then heated to reflux for 2 hours. Potassium chloride was filtered and washed with fresh chloroform. The filtrate was evaporated to dryness. To the residue was added 50ml chloroform and 1.5g 1-hydroxymethyl-(1H)-1,2,4-triazole. The reaction mixture was then stirred at room temperature for 5 hours. Water was added to the mixture, the organic layer was separated and washed with water and brine, dried and concentrated. The residue was purified by silica gel column chromatography to give 2.0g of 2-(4-chloro-2-fluoro-5-[(1,2,4-triazolylmethoxy)-carbonylmethoxy]phenyl)-4,5,6,7-tetrahydro-2H-isoindole-1,3-dione (Compound No. 15). M.P. 151-154 °C.

PREPARATION EXAMPLE B (Compound No. 43)

[0049]

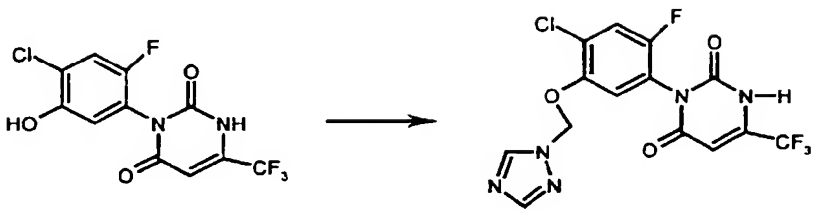


[0050] 2-(4-Chloro-2-fluoro-5-hydroxyphenyl)-4,5,6,7-tetrahydro-2H-isoindole-1,3-dione (4.0g, made by substantially following the methods of EP 0 083 055 A2), K_2CO_3 in 50 ml methyl ethyl ketone and 2.0g chloromethyl-1,2,4-triazole hydrochloride and then the mixture were heated to reflux for 5 hrs. After cooling the mixture was filtered and evaporated. Water and ethyl acetate were added to the residue. The organic layer was separated and washed with water and brine, dried and concentrated. The residue was purified by silica gel column chromatography to give 2.6g of 2-[4-chloro-2-fluoro-5-[(1,2,4-triazol-1H-yl)-methoxy]phenyl]-4,5,6,7-tetrahydro-2H-isoindole-1,3-dione (Compound No. 43) as an oil.

^{1}H NMR ($CDCl_3$): 8.32(s,1H), 8.01(s,1H), 7.28(d,2H), 7.06(d,2H), 6.04(s,2H), 2.44(bs,4H), 1.83(bs,4H).

PREPARATION EXAMPLE C (Compound No. 1334)

[0051]

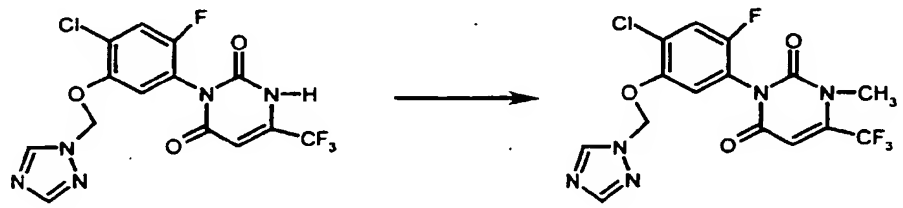


[0052] To a suspension of 60% NaH(0.5g) in 5 ml N,N-dimethylformamide was added 0.8g of 3-[4-chloro-2-fluoro-5-hydroxyphenyl]-6-trifluoromethyl-2,4-pyrimidione (made by substantially following the methods of EP 0 255 047 A1). After 10 minutes, 0.8g chloromethyl-1,2,4-triazole hydrochloride was added and then the mixture was heated at the bath of 80 °C for 8 hrs. After cooling, water and ethyl acetate were added to the mixture. The organic layer was separated and washed with water and brine, dried and concentrated. The residue was purified by silica gel column chromatography to give 0.75g of 3-[4-chloro-2-fluoro-5-[(1,2,4-triazol-1H-yl)-methoxy]phenyl]-6-trifluoromethyl-2,4-pyrimidione (compound 1334), mp. 216-219 °C

^{1}H NMR (acetone-D_6): 8.64(s,1H), 7.96(s,1H), 7.55(d,2H), 7.52(d,2H), 6.36(s,1H), 6.27(s,2H).

PREPARATION EXAMPLE D (Compound No. 1335)

[0053]

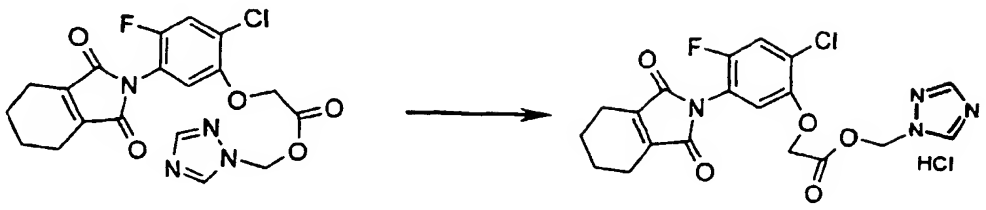


[0054] To a suspension of 60% NaH(0.08g) in 5 ml N,N-dimethylformamide was added 0.5g of 3-[4-chloro-2-fluoro-5-[(1,2,4-triazol-1H-yl)-methoxy]-phenyl]-6-trifluoromethyl-2,4-pyrimidione (compound 1334). After 10 minutes, 0.2g of dimethyl sulfate was added and then the mixture was stirred at room temperature overnight. Water and ethyl acetate were added to the mixture. The organic layer was separated and washed with water and brine, dried and concentrated. The residue was purified by silica gel column chromatography to give 0.2g of 1-methyl-3-[4-chloro-2-fluoro-5-[(1,2,4-triazol-1H-yl)-methoxy]phenyl]-6-trifluoromethyl-2,4-pyrimidione (compound 1335).

^{1}H NMR ($CDCl_3$): 8.31(s,1H), 7.98(s,1H), 7.36(d,2H), 7.07(d,2H), 6.60(s,1H), 6.06(s,2H), 4.00(s,3H).

PREPARATION EXAMPLE E (Compound No. 1870)

[0055]



[0056] 2-[4-Chloro-2-fluoro-5-[(1,2,4-triazol-1H-yl)-methoxy]phenyl]-4,5,6,7-tetrahydro-2H-isoindole-1,3-dione (2.0g) and hydrochloride acid (36%, 0.7g) in 20ml ethanol were stirred at room temperature for 10 minutes and then evaporated to dryness. To the residue was added 5 ml acetone and the mixture was filtered and dried to obtain 1.6g of the hydrochloride salt of 2-[4-chloro-2-fluoro-5-[(1,2,4-triazol-1H-yl)methoxy]phenyl]-4,5,6,7-tetrahydro-2H-isoindole-1,3-dione (Compound No. 1870) as a solid.

^{1}H NMR (DMSO-D_6, 300MHz): 8.79(s,1H), 8.12(s,1H), 7.70(d,1H), 7.28(d,1H), 6.25(s.2H), 4.96(s,2H), 2.36(bs,4H), 1.75(bs,4H).

[0057] The compounds of formula I are useful as an active ingredient for herbicides. When the compound of formula I of the present invention is used as a herbicide, the active ingredient can be used in a suitable formulation depending upon the particular purpose and by a suitable application method. Usually, the active ingredient is diluted with an inert liquid or solid carrier, and used in the form of a formulation such as a dust, a wettable powder, an emulsifiable concentrate, aqueous or oil suspension, pellets, granules, etc., If desirable one may also add a surfactant and/or other additive. Furthermore, one of ordinary skill in the art will recognize that the compound of the present invention may be used in combination with an insecticide, a nematocide, a fungicide, other herbicides, a plant growth controlling agent, a fertilizer, etc.

[0058] The compounds of the present invention can be used in the form of compositions or formulations. Examples of the preparation of compositions and formulations can be found in the American Chemical Society publication "Pesticidal Formulation Research," (1969), Advances in Chemistry Series No. 86, written by Wade Van Valkenburg; and the Marcel Dekker, Inc. publication "Pesticide Formulations", (1973) edited by Wade Van Valkenburg. In these compositions and formulations, the active substance is mixed with conventional inert agronomically acceptable (i.e., plant compatible and/or pesticidally inert) pesticide diluents or extenders such as solid carrier material or liquid carrier material, of the type usable in conventional pesticide compositions or formulations. By "agronomically acceptable carrier" is meant any substance which can be used to dissolve, disperse of diffuse the active ingredient in the composition without impairing the active ingredient's effectiveness and which by itself has no significant detrimental effect on the soil, equipment, desirable plants, or agronomic environment. If desired, adjuvants such as surfactants, stabilizers, antifoam agents and anti-drift agents may also be combined. Compositions and formulations according to the present invention may also include known pesticidal compounds. This expands the spectrum of activity of the preparation and may give rise to synergism.

[0059] The formulations, contain from about 0.1% to 99% by weight of active ingredient(s) and at least one of (a) about 0.1% to 20% surfactant(s) and (b) about 1% to 99.9% solid or liquid diluent(s).

[0060] If the compound of formula(I) is formulated with an additional herbicide, the concentration of active ingredient(s) in the compositions can vary within a wide range, depending on the active compound, the applications for which they are destined, the environmental conditions and the kind of formulation. The concentration of active ingredient(s) in the compositions is generally between 1% to 95%, preferably between 5% to 60%.

[0061] The formulations now will be described in detail with reference to typical Formulation Examples and do not limit the scope of this invention. In the following Formulation Examples, "parts" means "parts by weight". The compound number of the active ingredient corresponds to the one in Tables 1-24.

Formulation Examples 1a-c

[0062] Compound No. 1, 15 or 43 (all 50 parts), 5 parts of polyoxyethylene alkylaryl ether, 5 parts of sodium dodecylbenzenesulfate and 40 parts of synthetic hydrated silicon dioxide are well mixed while being powdered in order

to obtain a 50% wettable powder.

Formulation Example 2

[0063] Compound No. 35 (10 parts), 6 parts of polyoxyethylene alkylaryl ether, 4 parts of sodium dodecylbenzenesulfate, 30 parts of xylene and 50 parts of cyclohexanone are well mixed while being powdered in order to obtain a 10% by weight emulsifiable concentrate.

Formulation Example 3

[0064] Compound No. 15 (20 parts), 2 parts of synthetic hydrated silicon dioxide, 3 parts of polyoxyethylene sorbitan monooleate, 5 parts of carboxymethyl cellulose and 70 parts of water are well mixed and pulverized until the particle size of the active ingredient becomes less than 5 microns in order to obtain a 20% by weight granule.

Formulation Example 4

[0065] Compound No. 15 (5 parts), 1 part of isopropyl acid phosphate, 64 parts of kaolin clay and 30 parts of talc are well mixed and pulverized until the particle size of the active ingredient becomes less than 5 microns in order to obtain a 5% by weight dust.

Formulation Example 5

[0066] Compound No. 15 (25 parts), 3 parts of polyoxyethylene sorbitan monooleate, 2 parts of polyvinyl alcohol and 70 parts of water are well mixed and pulverized until the particle size of the active ingredient becomes less than 5 microns in order to obtain a 25% an aqueous suspension.

[0067] The effective dose of the compounds of the present invention is usually within a range of from 1g/ha to 3kg/ha, preferably from 5g/ha to 500g/ha.

Biological testing

[0068] The herbicidal activity of compounds of formula (I) with respect to weeds such as *Bidens pilosa* (beggartick, BID), *Solanum nigrum* (nightshade, NS), *Polygonum lapathifolium* (smartweed, SMT), *Abutilon theophrasti* (velvetleaf, VEL) was evaluated.

[0069] For each compounds, the evaluation tests were carried out according to the following operating procedures.

[0070] For preemergence tests, immediately after planting, the test compound was sprayed directly onto the soil surface. The flats or pots were placed in the greenhouse and then watered. For postemergence tests, the seeds were allowed to germinate and grow for 10 to 21 days. Before application, each series of development. The test plants were selected for uniformity, size and stage of development. The test plants were then treated with the test compound, returned to the greenhouse and watered. The plants not treated with the compound under evaluation were used as a comparison.

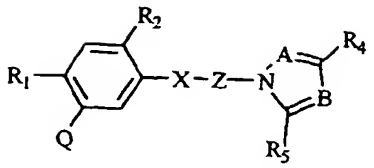
[0071] The compound to be evaluated was dissolved in an appropriate solvent, usually acetone, or the formulation of the evaluated compounds was added to the water, and sprayed over the flats or pots using a carrier volume equivalent to 187 or 468 liters per hectare at the rate of application in grams per hectare (g/ha). About two or four week s after application of the test compounds, the state of the plant was observed. Each species was evaluated on a scale of 0-100 in which 0 equals no activity and 100 equals total control. Some of the test results are shown in Table 26.

Table 26

Compound	Type	g/ha	BID	NS	SMT	VEL
15	POST	150	60	100	40	100
43	POST	1200	100	100	100	100

Claims

1. A compound represented by formula I



I

wherein

R_1 is selected from H, F, Br, Cl, NO_2 and CN;

R_2 is selected from F, Cl, Br, H and CN;

R_3 is selected from H and CN; and alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkenyl, haloalkenyl, haloalkynyl, alkoxy, alkylthio, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, aryl, arylalkyl, heteroaryl and heteroarylalkyl, all of which may be further substituted;

R_4 and R_5 are each independently selected from H, halo and CN; and alkyl, cycloalkyl, haloalkyl, alkoxy, alkylthio, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, CO_2R_6, $CONR_6R_{13}$, OR_6, SR_6, SO_2R_6, NR_6R_{13}, $SO_2NR_6R_{13}$, aryl, arylalkyl, heteroaryl and heteroarylalkyl, all of which may be further substituted;

R_6 is selected from H, alkyl, cycloalkyl, alkoxy, alkylthio, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, aryl and arylalkyl, all of which may be further substituted;

R_7 is selected from H, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl and COR_9, all of which may be further substituted;

R_8 is selected from alkyl, haloalkyl, cycloalkyl, cycloalkenyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, aryl and arylalkyl, all of which may be further substituted;

R_9 i s selected from H, alkyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, alkenyl, alkynyl, haloalkyl and cycloalkyl, all of which may be further substituted;

R_{10} is selected from H, halo, NH_2, alkyl, alkylsulfonylalkyl, alkylsulfinylalkyl, alkylsulfonylcycloalkyl, alkylsulfinylcycloalkyl, haloalkyl, CN, CO_2(alkyl), CONH(alkyl), $CON(alkyl)_2$ wherein each alkyl may be the same or different, CH_2CN, $CH_2CH{=}CH_2$, $CH_2C{\equiv}CH$, CH_2CO_2(alkyl), CH_2OCH_3 and CH_2-1,2,4-triazole, all of which may be further substituted;

R_{11} is selected from H, CN, alkyl, haloalkyl and CO_2(alkyl);

R_{12} is selected from H, alkyl, CO_2R_6, $CONR_6R_{13}$, OR_6, SR_6, SO_2R_6, $SO_2NR_6R_{13}$ and NR_6R_{13};

R_{13} is H, alkyl, aryl or arylalkyl;

A is N or CH;

B is N or CR_{10};

Z is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;

X is selected from O, S, NR_{12}, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH{=}C(halo)CO_2$, $CH_2CH(halo)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH{=}C(halo)CONH$ and $CH_2CH(halo)CONH$ when Z is $CH(R_3)$;

X is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, $CH{=}C(halo)CO$ and $CH_2CH(halo)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, $CH{=}C(halo)$, $CH_2CH(halo)$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH{=}C(halo)CONH$, $CH_2CH(halo)CONH$ and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$; and

Q is selected from NR_7COR_8, Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16 wherein

Q1 is 4,5,6,7-tetrahydrophthalimid-2-yl,

Q2 is 5,6,7,8-tetrahydro-1,2,4-triazolo[4,3-a]pyridin-3(2H)-one- 1-yl,

Q3 is 5,6,7,8-tetrahydro-1H,3H-[1,3,4]thiadiazolo[3,5-a]pyridazineimin- 1-yl, Q4 is 4,5,6,7-tetrahydroimidazo[1,5-a]pyridine-1,3(2H,5H)-dione-2-yl,

Q5 is 1,6,8-triazabicyclo[4,3,0]-nonane-7,9-dion-8-yl,

Q6 is 5-(1-methyethylidene)-2,4-oxazolidinedione-3-yl,

Q7 is 5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one-3-yl,

Q8 is 4-difluoromethyl-4,5-dihydro-3-methyl-1,2,4-triazol-5(1H)-one-1-yl,

Q9 is 2-methyl-1,2,4-oxadiazolidine-3,5-dione-4-yl,

Q10 is 4-chloro-1-methyl-5-difluoromethoxy-1H-pyrazol-3-yl,

Q11 is 4-bromo-1-methyl-5-trifluoromethyl-1H-pyrazol-3-yl,
Q12 is 1-substituted-6-trifluoromethyl-2,4-pyrimidione-3-yl,
Q13 is 1-substituted-6-trifluoromethyl-1,3,5-triazine-2,4-dione-1-yl,
Q14 is 4,5-disubstituted-4,5-dihydro-1,2,4-triazine-3(2H)-one-2-yl,
Q15 is 4-substituted-1,2,4-triazine-3,5(2H,4H)-dione-2-yl and
Q16 is 5-methyl-6-oxo-4-(trifluoromethyl)-6H-pyridazin-1-yl;

or the agronomically acceptable salts thereof.

2. The compound of claim 1 wherein

R_1 is selected from H, F, Br, Cl, NO_2 and CN;

R_2 is selected from F, Cl, Br, H and CN;

R_3 is selected from H, CN and halo; and $(C_1$-$C_{12})$alkyl, cyclo$(C_3$-$C_8)$alkyl, $(C_2$-$C_{12})$alkenyl, cyclo$(C_3$-$C_8)$alkenyl, $(C_2$-$C_{12})$alkynyl, halo$(C_1$-$C_{12})$alkyl, halo$(C_2$-$C_{12})$alkenyl, halo$(C_2$-$C_{12})$alkynyl, $(C_1$-$C_{12})$alkoxy, $(C_1$-$C_{12})$alkylthio, $(C_1$-$C_{12})$alkylsulfonyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfinyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$-$C_8)$alkyl, $(C_1$-$C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano$(C_1$-$C_{12})$alkoxy, cyano$(C_1$-$C_{12})$alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$-$C_{12})$alkylthio, halocyclo$(C_3$-$C_8)$alkyl, aryl, heteroaryl, aryl$(C_1$-$C_{12})$alkyl and heteroaryl$(C_2$-$C_{12})$alkyl, all of which may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, $(C_1$-$C_{12})$alkyl, cyclo$(C_3$-$C_8)$alkyl, $(C_2$-$C_{12})$alkenyl, cyclo$(C_3$-$C_8)$alkenyl, $(C_2$-$C_{12})$alkynyl, halo$(C_1$-$C_{12})$alkyl, halo$(C_2$-$C_{12})$alkenyl, halo$(C_2$-$C_{12})$alkynyl, $(C_1$-$C_{12})$alkoxy, $(C_1$-$C_{12})$alkylthio, $(C_1$-$C_{12})$alkylsulfonyl, $(C_1$-$C_{12})$alkylsulfinyl, phenyl, phen$(C_1$-$C_{12})$alkyl, phen$(C_2$-$C_{12})$alkenyl, phen$(C_2$-$C_{12})$alkynyl, cyano, halo$(C_1$-$C_{12})$alkoxy, 1,3-dioxalan-2-yl and nitro;

R_4 and R_5 are each independently selected from H, halo and CN; and $(C_1$-$C_{12})$alkyl, cyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkoxy, $(C_1$-$C_{12})$alkylthio, $(C_1$-$C_{12})$alkylsulfonyl $(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfinyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$-$C_8)$alkyl, $(C_1$-$C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano$(C_1$-$C_{12})$alkoxy, cyano$(C_1$-$C_{12})$alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$-$C_{12})$alkylthio, halocyclo$(C_3$-$C_8)$alkyl, CO_2R_6, $CONHR_6$, $CON((C_1$-$C_{12})$alkyl$)R_6$, OR_6, SR_6, SO_2R_6, NHR_6, $N((C_1$-$C_{12})$alkyl$)R_6$, $SO_2N((C_1$-$C_{12})$alkyl$)R_6$, aryl, heteroaryl, aryl$(C_1$-$C_{12})$alkyl and heteroaryl$(C_2$-$C_{12})$alkyl, all of which may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, $(C_1$-$C_{12})$alkyl, cyclo$(C_3$-$C_8)$alkyl, $(C_2$-$C_{12})$alkenyl, cyclo$(C_3$-$C_8)$alkenyl, $(C_2$-$C_{12})$alkynyl, halo$(C_1$-$C_{12})$alkyl, halo$(C_2$-$C_{12})$alkenyl, halo$(C_2$-$C_{12})$alkynyl, $(C_1$-$C_{12})$alkoxy, $(C_1$-$C_{12})$alkylthio, $(C_1$-$C_{12})$alkylsulfonyl, $(C_1$-$C_{12})$alkylsulfinyl, phenyl, phen$(C_1$-$C_{12})$alkyl, phen$(C_2$-$C_{12})$alkenyl, phen$(C_2$-$C_{12})$alkynyl, cyano, halo$(C_1$-$C_{12})$alkoxy, 1,3-thoxalan-2-yl and nitro;

R_6 is selected from H, $(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfinyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$-$C_8)$alkyl, $(C_1$-$C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano$(C_1$-$C_{12})$alkoxy, cyano$(C_1$-$C_{12})$alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$-$C_{12})$alkylthio, halocyclo$(C_3$-$C_8)$alkyl, aryl and aryl$(C_1$-$C_{12})$alkyl;

R_7 is selected from H, $(C_1$-$C_{12})$alkyl, cyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfinyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$-$C_8)$alkyl, $(C_1$-$C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano$(C_1$-$C_{12})$alkoxy, cyano(C_1C_{12})alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$-$C_{12})$alkylthio, halocyclo$(C_3$-$C_8)$alkyl and COR_9;

R_8 is selected from $(C_1$-$C_{12})$alkyl, cyclo$(C_3$-$C_8)$alkyl, cyclo$(C_3$-$C_8)$alkenyl, halo$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonyl $(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkysulfinyl$(C_1$-$C_{122})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$-$C_8)$alkyl, $(C_1$-$C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano $(C_1$-$C_{12})$alkoxy, cyano$(C_1$-$C_{12})$alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$-$C_{12})$alkylthio, halocyclo$(C_3$-$C_8)$alkyl, aryl and aryl$(C_1$-$C_{12})$alkyl;

R_9 is selected from H, $(C_1$-$C_{12})$alkyl, $(C_2$-$C_{12})$alkenyl, cyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfinyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$-$C_8)$alkyl, $(C_1$-$C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano$(C_1$-$C_{12})$alkoxy, cyano$(C_1$-$C_{12})$alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$-$C_{12})$alkylthio and halocyclo$(C_3$-$C_8)$alkyl;

R_{10} is selected from H, chloro, NH_2, $(C_1$-$C_{12})$alkyl, halo$(C_1$-$C_{12})$alkyl, CN, $(C_1$-$C_{12})$alkylsulfonyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfinyl$(C_1$-$C_{12})$alkyl, $(C_1$-$C_{12})$alkylsulfonylcyclo$(C_3$- $C_8)$alkyl, $(C_1$- $C_{12})$alkylsulfinylcyclo$(C_3$-$C_8)$alkyl, cyano$(C_1$-$C_{12})$alkoxy, cyano$(C_1$- $C_{12})$alkyl, cyanocyclo$(C_3$-$C_8)$alkyl, halo$(C_1$-$C_{12})$alkoxy, halo$(C_1$ - $C_{12})$alkylthio, halocyclo$(C_3$-$C_8)$alkyl, $CO_2(C_1$-$C_{12})$alkyl, $CONH(C_1$-$C_{12})$alkyl, $CON((C_1$-$C_{12})$alkyl$)_2$, CH_2CN, $CH_2CH{=}CH_2$, $CH_2C{\equiv}CH$, $CH_2CO_2(C_1$-$C_{12})$alkyl,

CH_2OCH_3, CH_2-1,2,4-triazole;

R_{11} is selected from H, CN, (C_1-C_{12})alkyl, halo(C_1-C_{12})alkyl and $CO_2(C_1-C_{12})$alkyl;

R_{12} is selected from H, (C_1-C_{12})alkyl, CO_2R_6, $CON((C_1-C_{12})alkyl)R_6$, OR_6, SR_6, SO_2R_6, $SO_2N((C_1-C_{12})alkyl)R_{13}$ and $N((C_1-C_{12})alkyl)R_{13}$;

R_{13} is H, (C_1-C_{12})alkyl, aryl or aryl(C_1-C_{12})alkyl;

A is N or CH;

B is N or CR_{10};

Z is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;

X is selected from O, S, NR_{12}, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH=C(Cl)CO_2$, $CH_2CH(Cl)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, CH=C(Cl)CONH and $CH_2CH(Cl)CONH$ when Z is $CH(R_3)$;

X is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, CH=C(Cl)CO, $CH_2CH(Cl)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, CH=C(Cl), $CH_2CH(Cl)$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, CH=C(Cl)CONH, $CH_2CH(Cl)CONH$ and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$;

Q is selected from NR_7COR_8, Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16;

or the agronomically acceptable salts thereof.

3. The compound of claim 2 wherein

R_1 is H, F or Cl;

R_2 is Cl;

R_3 is selected from H, bromo, chloro, fluoro, (C_1-C_6)alkyl, cyclo(C_5-C_6)alkyl, (C_2-C_6)alkenyl, cyclo(C_3-C_8)alkenyl, (C_2-C_6)alkynyl, halo(C_1-C_6)alkyl, halo(C_2-C_6)alkenyl, halo(C_2-C_6)alkynyl, (C_1-C_6)alkoxy, (C_1-C_6)alkylthio, aryl, heteroaryl, aryl(C_1-C_{12})alkyl and heteroaryl(C_2-C_{12})alkyl wherein the aryl or heteroaryl group is selected from furan, naphthalene, phenyl, pyrazole, pyridine, pyrimidine, thiophene and triazole, said aryl and heteroaryl group may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, (C_1-C_{12})alkyl, cyclo(C_3-C_8)alkyl, (C_2-C_{12})alkenyl, cyclo(C_3-C_8)alkenyl, (C_2-C_{12})alkynyl, halo(C_1-C_{12})alkyl, halo(C_2-C_{12})alkenyl, halo(C_2-C_{12})alkynyl, (C_1-C_{12})alkoxy, (C_1-C_{12})alkylthio, (C_1-C_{12})alkylsulfonyl, (C_1-C_{12})alkylsulfinyl, phenyl, phen(C_1-C_{12})alkyl, phen(C_2-C_{12})alkenyl, phen(C_2-C_{12})alkynyl, cyano, halo(C_1-C_{12})alkoxy, 1,3-dioxalan-2-yl and nitro;

R_4 and R_5 are each independently selected from H, bromo, chloro, fluoro, CN, (C_1-C_6)alkyl, cyclo(C_5-C_6)alkyl, halo(C_1-C_6)alkyl, (C_1-C_6)alkoxy, (C_1-C_6)alkylthio, CO_2R_6, $CONHR_6$, $CON((C_1-C_{12})alkyl)R_6$, OR_6, SR_6, SO_2R_6, NHR_6, $N((C_1-C_{12})alkyl)R_6$, $SO_2N((C_1-C_{12})alkyl)R_6$, aryl, heteroaryl, aryl$(C_1-C_{12})$alkyl and heteroaryl$(C_2-C_{12})$alkyl, wherein the aryl or heteroaryl group is selected from furan, naphthalene, phenyl, pyrazole, pyridine, pyrimidine, thiophene and triazole, said aryl and heteroaryl group may be further substituted with from one to three substituents independently selected from bromo, chloro, fluoro, (C_1-C_{12})alkyl, cyclo(C_3-C_8)alkyl, (C_2-C_{12})alkenyl, cyclo(C_3-C_8)alkenyl, (C_2-C_{12})alkynyl, halo(C_1-C_{12})alkyl, halo(C_2-C_{12})alkenyl, halo(C_2-C_{12})alkynyl, (C_1-C_{12})alkoxy, (C_1-C_{12})alkylthio, (C_1-C_{12})alkylsulfonyl, (C_1-C_{12})alkylsulfinyl, phenyl, phen(C_1-C_{12})alkyl, phen(C_2-C_{12})alkenyl, phen(C_2-C_{12})alkynyl, cyano, halo(C_1-C_{12})alkoxy, 1,3-dioxalan-2-yl and nitro;

R_6 is selected from H, (C_1-C_{12})alkyl, aryl and aryl(C_1-C_6)alkyl, where the aryl group is naphthyl or phenyl;

R_7 is selected from H, (C_1-C_{12})alkyl, cyclo(C_3-C_8)alkyl, halo(C_1-C_{12})alkyl and COR_9;

R_8 is selected from (C_1-C_{12})alkyl, cyclo(C_3-C_8)alkyl, cyclo(C_3-C_8)alkenyl, halo(C_1-C_{12})alkyl, aryl and aryl(C_1-C_6)alkyl;

R_9 is selected from H, (C_1-C_6)alkyl, (C_2-C_{12})alkenyl, (C_2-C_6)alkenyl, cyclo(C_3-C_8)alkyl, cyclo(C_5-C_6)alkyl, halo(C_1-C_{12})alkyl, halo(C_1-C_6)alkyl;

R_{10} is selected from H, chloro, NH_2, (C_1-C_6)alkyl, halo(C_1-C_{12})alkyl, halo(C_1-C_6)alkyl, CN, $CO_2(C_1-C_{12})$alkyl, $CONH(C_1-C_{12})$alkyl, $CON((C_1-C_{12})alkyl)_2$, CH_2CN, $CH_2CH=CH_2$, $CH_2C\equiv CH$, $CH_2CO_2(C_1-C_{12})$alkyl, CH_2OCH_3, CH_2-1,2,4-triazole;

R_{11} is selected from H, CN, (C_1-C_6)alkyl, halo(C_1-C_{12})alkyl, halo(C_1-C_6)alkyl and $CO_2(C_1-C_{12})$alkyl;

R_{12} is selected from H, (C_1-C_8)alkyl, CO_2R_6, $CON((C_1-C_8)alkyl)R_6$, OR_6, SR_6, SO_2R_6, $SO_2N((C_1-C_8)alkyl)R_{13}$ and $N((C_1-C_8)alkyl)R_{13}$;

R_{13} is H, (C_1-C_8)alkyl, aryl or aryl(C_1-C_6)alkyl where the aryl group is naphthyl or phenyl;

A is N or CH;

B is N or CR_{10};

Z is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;

X is selected from O, S, NH, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH=C(Cl)CO_2$, $CH_2CH(Cl)CO_2$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$ and $CH_2CH(Cl)CONH$ when Z is $CH(R_3)$;

X is selected from CO, $OCH(R_6)CO$, $SCH(R_6)CO$, $CH=C(Cl)CO$ and $CH_2CH(Cl)CO$ when Z is O;

X is selected from O, S, CO, $OCH(R_6)$, $CH=C(Cl)$, $CH_2CH(Cl)$, CONH, $OCH(R_6)CONH$, $SCH(R_6)CONH$, $CH=C(Cl)CONH$, $CH_2CH(Cl)CONH$ and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$;

Q is NR_7COR_8, or selected from Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16;

or the agronomically acceptable salts thereof selected from those formed from hydrochloric acid, sulfuric acid, acetic acid, propionic acid, phosphoric acid and oxalic acid.

4. The compound of claim 3 wherein

R_1 is H, F or Cl;

R_2 is Cl;

R_3 is selected from H, bromo, chloro, fluoro, (C_1-C_6)alkyl, cyclo(C_5-C_6)alkyl, (C_2-C_6)alkenyl, cyclo(C_3-C_8)alkenyl, (C_2-C_6)alkynyl, halo(C_1-C_6)alkyl, halo(C_2-C_6)alkenyl, halo(C_2-C_6)alkynyl, (C_1-C_6)alkoxy, (C_1-C_6)alkylthio, 3-furyl, 4-chloro-2-furyl, 5-chloro-2-furyl, 5-chloro-3-furyl, 2, 5-dichloro-3-furyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-thoxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3,5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2, 5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl, 3,4,5-trifluorophenyl, 2-pyridyl, 4-chloro-2-pyridyl, 6-chloro-2-pyridyl, 4,6-dichloro-2-pyridyl, 3-pyridyl, 5-bromo-3-pyridyl, 5,6-dichloro-3-pyridyl, 5-chloro-3-pyridyl, 5-fluoro-3-pyridyl, 4-pyridyl, 2-fluoro-4-pyridyl, 2-chloro-4-pyridyl, 2-chloro-6-methyl-4-pyridyl, 2-methyl-4-pyridyl, 2-methoxy-4-pyridyl, 2-cyano-4-pyridyl, 2,6-difluoro-4-pyridyl, 2, 6-dichloro-4-pyridyl, 2-thienyl, 3-thienyl, 4-chloro-2-thienyl, 5-chloro-2-thienyl, 5-chloro-3-thienyl and 2,5-dichloro- 3-thienyl;

R_4 and R_5 are each independently selected from H, bromo, chloro, fluoro, CN, (C_1-C_6)alkyl, cyclo(C_5-C_6)alkyl, halo(C_1-C_6)alkyl, (C_1-C_6)alkoxy, (C_1-C_6)alkylthio, CO_2R_6, $CONHR_6$, $CON((C_1-C_6)alkyl)R_6$, OR_6, SR_6, SO_2R_6, NHR_6, 3-furyl, 4-chloro-2-furyl, 5-chloro-2-furyl, 5-chloro-3-furyl, 2,5-dichloro-3-furyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-thoxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3, 5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2,5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl, 3,4,5-trifluorophenyl, 2-pyridyl, 4-chloro-2-pyridyl, 6-chloro-2-pyridyl, 4,6-dichloro-2-pyridyl, 3-pyridyl, 5-bromo-3-pyridyl, 5,6-dichloro-3-pyridyl, 5-chloro-3-pyridyl, 5-fluoro-3-pyridyl, 4-pyridyl, 2-fluoro-4-pyridyl, 2-chloro-4-pyridyl, 2-chloro-6-methyl-4-pyridyl, 2-methyl-4-pyridyl, 2-methoxy-4-pyridyl, 2-cyano-4-pyridyl, 2,6-difluoro-4-pyridyl 2,6-dichloro-4-pyridyl, 2-thienyl, 3-thienyl, 4-chloro-2-thienyl, 5-chloro-2-thienyl, 5-chloro-3-thienyl and 2,5-dichloro-3-thienyl;

R_6 is selected from H, (C_1-C_6)alkyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-dioxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3,5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2,5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl and 3,4,5-trifluorophenyl;

R_7 is selected from H, (C_1-C_6)alkyl, cyclo(C_5-C_6)alkyl, halo(C_1-C_6)alkyl and COR_9;

R_8 is (C_1-C_6)alkyl, cyclo(C_5-C_6)alkyl, halo(C_1-C_{12})alkyl, 1-naphthyl, 2-naphthyl, phenyl, 4-methylphenyl, 4-methoxyphenyl, 4-nitrophenyl, 4-fluorophenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 4-bromophenyl, 4-chlorophenyl, 3-fluorophenyl, 4-trifluoromethoxyphenyl, 4-cyanophenyl, 3-(1,3-dioxolan-2-yl)phenyl, 2-fluorophenyl, 2-chlorophenyl, 2-trifluoromethoxyphenyl, 3,5-difluorophenyl, 3,5-dichlorophenyl, 2,4-difluorophenyl, 2,5-difluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3-fluoro-5-trifluoromethylphenyl and 3,4,5-trifluorophenyl;

R_9 is selected from H, (C_1-C_6)alkyl, (C_2-C_6)alkenyl, cyclo(C_5-C_6)alkyl and halo(C_1-C_6)alkyl;

R_{10}	is selected from H, chloro, NH_2, $(C_1$-$C_6)$alkyl, halo$(C_1$-$C_6)$alkyl, CN, $CO_2(C_1$-$C_6)$alkyl, CONH$(C_1$-$C_6)$alkyl, CON$((C_1$-$C_6)$alkyl$)_2$, CH_2CN, $CH_2CH{=}CH_2$, $CH_2C{\equiv}CH$, $CH_2CO_2(C_1$-$C_6)$alkyl, CH_2OCH_3 and CH_2-1,2,4-triazole;
R_{11}	is H, CN, $(C_1$-$C_6)$alkyl, halo$(C_1$-$C_6)$alkyl and $CO_2(C_1$-$C_6)$alkyl;
R_{12}	is selected from H, $(C_1$-$C_8)$alkyl, $CO_2(C_1$-$C_6)$alkyl, CON$((C_1$-$C_6)$alkyl$)_2$, $O(C_1$-$C_6)$alkyl, $S(C_1$-$C_6)$alkyl, $SO_2(C_1$-$C_6)$alkyl, SO_2N$((C_1$-$C_6)$alkyl$)_2$ and N$((C_1$-$C_6)$alkyl$)_2$;
R_{13}	is H, $(C_1$-$C_6)$alkyl, aryl or aryl$(C_1$-$C_4)$alkyl where the aryl group is naphthyl or phenyl;
A	is N or CH;
B	is N or CR_{10};
Z	is O, $CH(R_3)$, CO, CS, $CONR_{12}$ or $CSNR_{12}$;
X	is selected from O, S, NH, CO_2, $OCH(R_6)CO_2$, $SCH(R_6)CO_2$, $CH{=}C(Cl)CO_2$, $CH_2CH(Cl)CO_2$, CONH, $OCH(R_6)$CONH, $SCH(R_6)$CONH, CH=C(Cl)CONH and $CH_2CH(Cl)$CONH when Z is $CH(R_3)$;
X	is selected from CO, $OCH(R_6)$CO, $SCH(R_6)$CO, CH=C(Cl)CO and $CH_2CH(Cl)$CO when Z is O;
X	is selected from O, S, CO, $OCH(R_6)$, CH=C(Cl), $CH_2CH(Cl)$, CONH, $OCH(R_6)$CONH, $SCH(R_6)$CONH, CH=C(Cl)CONH, $CH_2CH(Cl)$CONH and NR_{12} when Z is CO, CS, $CONR_{12}$ or $CSNR_{12}$;
Q	is selected from Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15 and Q16;

or the agronomically acceptable salts thereof selected from those formed from hydrochloric acid, acetic acid, phosphoric acid and oxalic acid.

5. A herbicidal composition comprising a compound as in claim 1, 2, 3 or 4 and an agronomically acceptable carrier.

6. The composition of claim 5 which contains from about 0.1% to 99% by weight of said compound.

7. The composition of claim 6 further comprising a second pesticide or a fertilizer.

8. A method of controlling a weed comprising applying a herbicidally effective amount of a composition of claim 5 and an agronomically acceptable carrier to the weed, to the locus of the weed or to the growth medium of said weed.

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(54) Substituted triazoles, imidazoles and pyrazoles as herbicides

(57) The present invention relates to novel heterocyclic compounds and their agronomically suitable salts, methods for the use of these compounds in controlling unwanted plant species, and the use of herbicidal compositions containing these compounds. In particular, the present invention pertains to substituted and unsubstituted triazoles, imidazoles and pyrazoles linked to a heterocyclic substituted benzene group. Such compounds are useful as pre-emergent and post-emergent herbicides.

EP 1 061 075 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 30 4787

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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C07D
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	29 November 2000	Van Bijlen, H

CATEGORY OF CITED DOCUMENTS

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